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BEHAVIORIAL RISK FACTOR SURVEILLANCE IN CALIFORNIA 1984 - 1989

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1984 - 1989

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I. SUMMARY

The Behavioral Risk Factor Survey (BRFS) is an on-going effort to assess the prevalence of and trends in health-related behaviors in the California adult population. Information on seven self-reported behaviors or factors that are known to be causally associated with the current leading causes of mortality are summarized in Table A on page 3.

A significant proportion of adults in California report that they engage in behaviors that place them at an increased, but avoidable, risk for chronic diseases or unintentional injuries. The proportion of adults engaging in behaviors which are associated with adverse health outcomes varies by age, gender, race/ethnicity, and educational level.

- Over the six-year period of 1984-1989, the percent of California adults at risk for the seven risk factors covered in this report are:

No Exercise	23.9%
Cigarette Smoking	23.4%
Hypertension	21.0%
Seat Belt Nonuse (1986-1989)	18.5%
Overweight	17.4%
Chronic Drinking	7.8%
Drinking and Driving	3.8%

(Brief definitions are provided in the footnote to Table A. Survey questions are found in Appendix A.)

- Compared to the 36 other states participating in BRFS in 1988, fewer Californians smoke cigarettes, have been told that they have high blood pressure, or fail to use seat belts regularly. However, California is at the median for overweight, and has a higher prevalence than other participating states for self-reported chronic drinking and drinking and driving.

- Over the six years of data collection, statistically significant decreases in self-reported hypertension and seat belt nonuse were reported. The percent of current smokers significantly decreased among men, but not among women. No significant trends were seen in exercise, overweight or drinking and driving. The prevalence of chronic drinking declined sharply in 1989. This may have resulted from changes in survey questions related to alcohol consumption, and may not reflect a true decline in chronic drinking.

- Risk factors vary with gender: Men are more likely than women to report seat belt nonuse, drinking and driving and chronic drinking. Women are more likely than men to report that they do not exercise outside of work. Among Hispanics

and persons of other race/ethnicity, males are more likely than women to smoke; among blacks and whites there is no difference in smoking prevalence for men and women. Among whites, men are more likely than women to be overweight; among blacks, women are more likely than men to be overweight.

- Risk factors vary with race/ethnicity: Blacks and whites are more likely than Hispanics and those of other race/ethnicity to have been told that they have high blood pressure. Whites are more likely to report drinking more than sixty alcoholic beverages per month on average. Nonwhites are less likely than whites to exercise outside of work. White and black women are more likely than Hispanic women or women of other race/ethnicity to be current smokers; among men, there are no significant differences in smoking by race/ethnicity. Among men, Hispanics are significantly more likely to report drinking and driving; among women, there are no significant differences in drinking and driving by race/ethnicity.

- Risk factors vary with age: Young adults (18 to 24 years old) are more likely to report seat belt nonuse, chronic drinking and drinking and driving. Smoking prevalence and overweight are most common among 45-54 year olds. Persons aged 65 and older are most likely to report a history of hypertension and that they do not exercise.

- Risk factors vary with educational level: Adults with a high school education or less are more likely than those with education beyond high school to report cigarette smoking, seat belt nonuse, failure to exercise, and overweight. Women with a high school education or less are more likely than women with more education to report a history of hypertension. Educational level is not associated with self-reported chronic drinking or drinking and driving.

The complex patterns demonstrated in this report underscore the need for collecting, analyzing and disseminating data such as these as part of the public health effort. Our attempts to improve public health and motivate change will be more effective if they are enlightened by information about which groups are most at risk, and how behaviors are changing over time.

TABLE A

BEHAVIORAL RISK FACTOR SURVEILLANCE IN CALIFORNIA: 1984 - 1989
SUMMARY OF PREVALENCE RATES AND TRENDS IN SEVEN SELF-REPORTED RISK FACTORS
AMONG ADULTS AGED 18 AND OLDER

Risk Factor[1]	Percent at risk 1984-89	BRFS rank[2] 1988	Trend 1984 - 1989	Groups at highest risk[3] Gender	Race	Age	Education
Smoking	23.4%	8	Significant decrease among men only	Among H/O, M	Among F, W/B	45-54	HS-
Seat Belt Nonuse	18.5%[4]	5	Significant decrease, both genders	M	Among M, H/B	18-24	HS-
No Exercise	23.9%	N/A	None	F	B/H/O	65 +	HS-
Overweight	17.4%	19	None	Among W, M Among B, F	W/B/H	45-54	HS-
Hypertension	21.0%	10	Significant decrease among men and overall	--	B/W	65 +	Among F, HS-
Chronic Drinking	7.8%	32	Significaptly lower 1989 only[5]	M	W	18-24	--
Drinking and Driving	3.8%	28	None	M	Among M, H	18-24	--

[1] Questions upon which definitions are based are provided in Appendix A.

Smoking: Have smoked at least 100 cigarettes and currently smoke regularly.
Seat Belt Nonuse: Use seat belts sometimes, seldom or never.
No Exercise: Have not participated in any physical activity or exercise outside of regular work duties in the last month.
Overweight: Body Mass Index of 27.8 or higher for men or 27.3 or higher for women.
Hypertension: Have been told they have high blood pressure at least once by a physician, nurse or other health care professional.
Chronic Drinking: Drink sixty or more alcoholic beverages per month on average.
Drinking and Driving: Drove on at least one occasion in the last month after drinking too much.

[2] California's rank (low to high) in 1988 among the 37 states participating in the Behavioral Risk Factor Surveillance System in 1988 (unpublished data).

[3] F = Females
M = Males
W = Whites
B = Blacks
H = Hispanics
O = Other
HS- = High School education or less
HS+ = Education beyond High School

[4] For seat belt nonuse, data is aggregated over 1986 through 1989 in order to examine behavior since implementation of the California Mandatory Seat Belt Law.

[5] May have resulted from changes in the survey instrument in 1989. See Appendix A.

II. BACKGROUND

Chronic diseases and unintentional injuries are the major causes of mortality today. In 1987, the five leading causes of death in California were heart disease, cancer, stroke, unintentional injuries, and chronic obstructive pulmonary disease.[1] Together, these five causes accounted for nearly 75 percent of all deaths in California.

The tragedy is that to a large extent, these conditions are preventable. It is becoming increasingly apparent that the occurrence of these diseases is often related to choices that individuals make -- for example, whether to smoke, how much alcohol to drink, which foods to eat, how much and how often to exercise, and whether to use seat belts. While other factors also play important roles in determining the health of Californians, there is no doubt that these personal decisions have a critical impact on health.

State, county and local health departments are responsible for protecting and improving public health. To this end, they support a wide variety of programs designed to provide the public with information about the connection between behavior and disease, to help people adopt and maintain healthy lifestyles, and to assist in providing preventive medical services.

To be most effective, these efforts need to be developed and evaluated in the light of knowledge about the prevalence of health-related behaviors in the population and their changes over time. Groups which are at highest risk need to be identified so that appropriate strategies for targeting these groups can be developed.

The California Department of Health Services has been monitoring key health-related behaviors among adults in California since 1984. Information is collected through the Behavioral Risk Factor Survey (BRFS). Telephone interviews of randomly selected adults aged 18 and older are conducted monthly to collect information on a wide variety of behaviors related to chronic diseases and injuries.

Information collected from 1984 to 1989 by BRFS on the following seven key risk factors is presented in this report:

- Cigarette Smoking
- Seat Belt Use
- Exercise
- Overweight
- Hypertension
- Chronic Drinking
- Drinking and Driving

Annual prevalence rates are provided for each of the six years of data collection, as well as rates for specific age, gender, race, and education groups using aggregated data. In addition, the prevalence of these risk factors in California is compared to the 36 other states participating in BRFS in 1988, the most recent year for which data from other states are available.

It is hoped that this information will assist state, county and local health agencies and other health professionals and organizations in developing, implementing and evaluating chronic disease intervention programs.

III. METHODS

A. Questionnaire Design

The BRFS questionnaire is developed each year by the Centers for Disease Control in collaboration with participating state agencies. For comparability, questions have been selected from previously conducted national surveys wherever possible. The questionnaire has three components: 1) a set of core questions which are administered by all states participating in the BRFS and which are relatively constant from year to year, 2) a series of modules developed by CDC which states have the option of selecting from each year, and 3) optional questions designed and administered by individual states to address issues of local concern.

Participants are asked a wide variety of questions concerning behaviors related to chronic diseases and injuries, such as seat belt use, exercise, weight control, diet, tobacco and alcohol consumption, and utilization of cancer screening procedures and other preventive measures. In addition, participants provide basic demographic information such as age, race/ethnicity, marital and employment status, household income and education. Participation is completely voluntary and anonymous.

During 1989, the survey administered by California contained a total of 122 questions. Based on the gender and reported behaviors of the participant, as few as fifty questions could be required to complete an interview.

B. Interview Procedures

Interviews are conducted by trained interviewers following standardized procedures developed by CDC. The majority of interviews are conducted during evenings and on weekends. Appointments are made as needed to conduct interviews in Spanish by bilingual interviewers. The average time to complete an interview in 1989 was approximately eighteen minutes.

In 1984, 99 interviews per month were conducted. This has gradually increased to the present sample size of 201 interviews per month. Interviewers recorded responses with paper and pencil until May 1985, when the computer-assisted telephone interview (CATI) system was fully implemented.

Using the CATI system, interviewers read questions as they are displayed on the computer screen, and responses are keyed directly into the computer. Automatic data editing and coding programs prevent invalid responses from being entered and greatly increase the accuracy and speed of data entry. In addition, the interview process is facilitated by automatically skipping questions based on prior responses, so that, for example, men are not asked about pap smears.

C. Sample Selection

Participants are selected using the Waksberg method,[2] a three-stage cluster sampling technique. The sampling methodology is designed to generate a random sample of California telephone numbers, including unlisted and new subscribers. CDC provides participating agencies with a series of randomly generated 8-digit numbers based on the appropriate area codes located in the survey area. An 8-digit number is selected from the list at random, and the last two digits are generated through random digit dialing. If the number is a residential number, it is used to define a cluster of 100 numbers with the same initial eight digits (area code, prefix, and first two digits). Numbers are randomly drawn from the cluster and telephone calls are made until three interviews are completed or all one hundred numbers in the cluster are cleared (i.e., businesses, non-working, no answers, refusals).

Once a household is reached, one adult is randomly selected to participate in the survey from all eligible adults residing in the household. To be eligible, the person must be at least eighteen years old. If the person selected is not available, an appointment is made to conduct the interview at a later time and date. If the person selected refuses to participate or is not available during the study period, no other household member can be selected. Instead, the process begins again with the random selection of a telephone number from the same cluster.

In order to maximize the representativeness of the sample, standardized procedures are followed for recontacting refusals, busy numbers and numbers for which there is no answer. From ten to twelve calls are made on average for each completed interview. For example, during April of 1989, a total of 2,473 calls were made to 531 randomly generated telephone numbers to identify 250 eligible adults, from which 201 interviews were completed.

D. Response Rates

During 1989, interviews were completed for 82.8% of eligible adults who were identified through the above procedures. Using a formula developed by the Council of American Survey Research Organizations (CASRO), the response rate was 64.2%. This formula is more conservative in that it includes in the denominator a fraction of numbers for which there was no answer.

E. Data Analysis

Interview data are compiled and transmitted electronically to CDC, where further data editing and programming occurs. CDC provides participating agencies with summary tables of key risk behaviors and with raw data sets on request. With the assistance of CDC technical staff, the California Department of Health Services has developed the capacity to perform the vast majority of data editing and programming locally. This greatly facilitates the rapid analysis, review and dissemination of data.

All interviews are weighted to account for the probability of being drawn into the sample. This weighting procedure utilizes information on the number of adults in the household, the number of unique telephone numbers in the household, and the number of interviews completed within each cluster. In addition, data are weighted to reflect the age-, race- and sex-specific distribution of the 1986 California population, using population estimates from the California Department of Finance. Adjusting survey results to a common reference population allows changes in the prevalence of risk behaviors to be evaluated independently from changes in the demographic characteristics of the population.

Persons who identified themselves as being of Hispanic origin are defined as Hispanic, regardless of race. For calculations of single-year prevalence rates, weights are based on race/ethnicity defined as white/nonwhite, where nonwhites include Hispanics, blacks, and those of other race/ethnicity. This categorization was necessary due to the relatively small sample sizes of specific race/ethnicity groups within a given year. For calculations of prevalence rates based on aggregated data, weights are based on four race/ethnic groups as presented in Table B.

Interview data have been analyzed using the SAS[3] supplemental program SESUDAAN,[4] which was designed specifically for calculating standardized rates and standard errors from data collected in a complex multistage sample survey. All confidence intervals are calculated to 95% probability.

Sample sizes and 95 percent confidence intervals for each point estimate are presented in tables located in Appendix B. Comments within the body of this report on the significance of differences are based on these data. Differences between two point estimates for which confidence intervals do not overlap are considered to be statistically significant. When the amount of overlap was small, Z-ratios were calculated to assess statistical significance.

The small number of participants who did not know how to respond to a question or who refused to respond are grouped in a

separate category instead of being excluded from the analyses. In this way, the denominator is constant for each risk factor. The body of this report presents data on the percent of respondents who are "at risk" for a given factor. The number and weighted proportion of nonrespondents ("don't know" or "refused") for each question is provided in Appendix B.

F. Sample Characteristics

Table B shows the demographic characteristics of the 10,650 participants in the BRFS from 1984 to 1989, and compares them to the California population in 1986. Population data were obtained from the California Department of Finance. As can be seen, women, non-Hispanic whites, and persons aged 25-44 are over-represented in the sample, which is commonly found in telephone surveys. As discussed above, the analyses presented in this report weight the sample to reflect the age-, race- and age-specific distribution of the 1986 California population, as shown in Table B.

Table B
Demographic characteristics of BRFS participants, 1984-1989

	BRFS Participants		1986 California population*
	N	%	%
Male	4,621	43.4	48.7
Female	6,029	56.6	51.3
White	7,654	71.9	65.8
Black	690	6.5	7.0
Hispanic	1,680	15.8	18.8
Other	626	5.9	8.3
18 - 24	1,353	12.7	15.8
25 - 34	2,828	26.6	24.4
35 - 44	2,375	22.3	19.8
45 - 54	1,324	12.4	12.9
55 - 64	1,165	10.9	12.2
65 +	1,605	15.1	14.8
TOTAL	10,650		

* from California Department of Finance, baseline 1986 projections controlled to July 1989 county estimates

G. Limitations

Telephone surveys are a cost-effective method of rapidly obtaining population-based data. However, a number of limitations must be kept in mind when interpreting these data.

Certain groups are excluded from or under-represented in telephone surveys; specifically, persons who do not live in a household with a telephone, people who are difficult to contact because of the hours they are at home, and people who refuse to participate. Insofar as these groups have behaviors which are different from the general population, estimates for the general population based on the survey sample will be biased.

The validity of survey results also depends on the accuracy of responses by participants. All self-reported data are affected by the willingness of participants to respond honestly; this is especially important when considering the validity of responses to questions which are socially sensitive or assess adherence to the law. The self-reported nature of these data must be kept in mind when interpreting results.

Validity is also affected by the ability of the respondent to accurately interpret the question and recall past behavior. To minimize these problems, BRFS incorporates questions which have been successfully used in previous surveys whenever possible.

As mentioned above, annual prevalence rates have been calculated using data adjusted to a standard population so that changes in behavior could be assessed independently from changes in the demographics of the California population. However, it should be kept in mind that the annual prevalence rates presented in this report therefore reflect the demographic composition of California in 1986; weighting to the demographics of each specific year would cause the prevalence rates to vary somewhat.

In order to have adequate sample sizes for meaningful comparisons, calculations of prevalence rates by gender and race and by gender, age and educational level use data aggregated over the six years of data collection. Since some behaviors are changing over time, the gender-, age-, race- and education-specific prevalence rates based on six years of aggregated data may not accurately reflect the actual rates in 1989.

Because of the relatively small number of interviews completed, data on Asians, Native Americans and those of other (i.e., not self-reported as white, black or Hispanic) race or ethnicity are grouped together in one category. We appreciate the limited usefulness of such a heterogenous grouping, but have chosen to present the data for this aggregated group since it contributes to the overall population rate.

IV. RESULTS AND DISCUSSION

The following section presents the results and a brief discussion of analyses of seven key behaviors or factors known to be causally associated with the occurrence of chronic diseases and unintentional injuries.

Each section contains a brief summary of the significance of the behavior and the definition of the behavior which is used in this report. The questions used in the BRFS on which the definitions are based are provided in Appendix A.

Figures present prevalence rates by year, and, where analyses identified differences in trends by gender, by year and gender. Subsequent figures present prevalence rates by race/ethnicity and gender, and by gender, ten-year age category, and educational level, using aggregated data. Educational level is defined as a dichotomous variable: high school education or less vs. education beyond high school graduation or GED. Education beyond high school includes attendance at technical school and college. All prevalence rates are weighted as discussed in the Methods section of this report.

Tables located in Appendix B present the prevalence rates on which figures in this section are based, as well as the sample sizes and 95% confidence intervals.

A. CIGARETTE SMOKING

1. Significance

The 1984 Surgeon General's report, The Health Consequences of Smoking: Chronic Obstructive Lung Disease,[5] observed that cigarette smoking is the chief single avoidable cause of death in our society and the most important health issue of our time.

Cigarette smoking is a major risk factor for the development of heart disease, cancers of the lung, larynx, pharynx, oral cavity, pancreas, kidney, and urinary bladder. In total, 40 percent of all cancer deaths are related to smoking. Additionally, smoking is the primary cause of 80 to 90 percent of chronic obstructive respiratory conditions.

Smoking during pregnancy is associated with low birth weight and increased risk for spontaneous abortion, fetal death, and neonatal death. It has recently been implicated as a risk factor in sudden infant death syndrome.

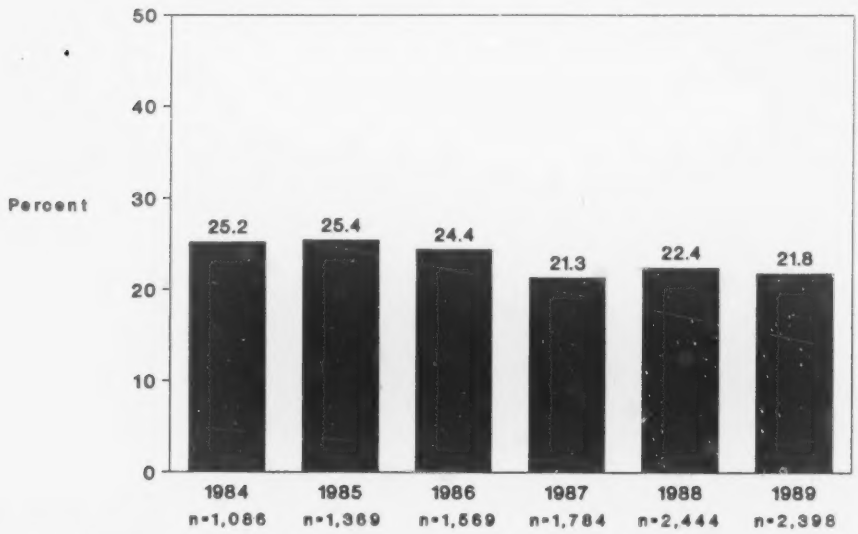
Smoking also poses health hazards for non-smokers, particularly children, as they breathe more rapidly than adults and inhale more airborne contaminants relative to their body weight. Children of parents who smoke have been found to have a higher incidence of respiratory problems. Some studies also indicate that non-smoking wives of spouses who smoke are at increased risk for cancer. Other effects associated with passive smoking include anginal attacks, and eye and throat irritation.

2. Definition

Respondents are considered current smokers if they state that they have smoked at least one hundred cigarettes in their lifetime and presently smoke cigarettes on a regular basis.

3. Results

Figure 1: PREVALENCE OF CURRENT SMOKING AMONG ADULTS IN CALIFORNIA: 1984 - 1989*



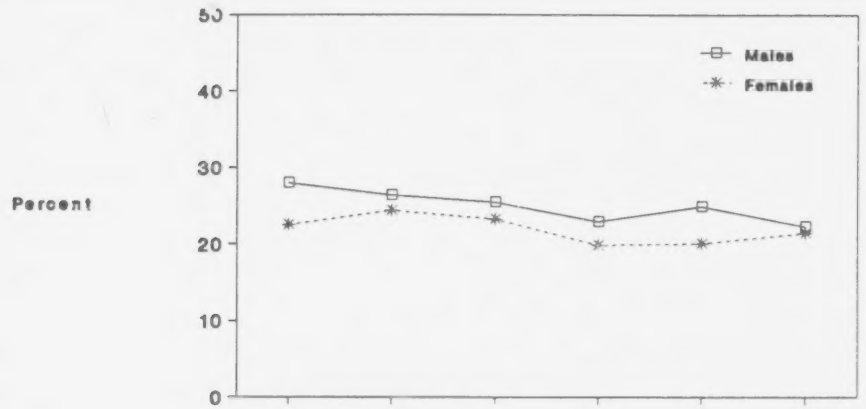
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 1 depicts changes over time in the self-reported prevalence of cigarette smoking among adults aged 18 or older in California from 1984 to 1989.

- Overall, the percent of current smokers in California has declined from 25.2 percent in 1984 to 21.8 percent in 1989. This modest decline, although not statistically significant, is consistent with an average national decline in smoking of 0.5 percent per year reported in the 1989 Surgeon General's report on smoking.[6]

- Compared to the thirty-six other states participating in the BRFS in 1988, California ranked eighth lowest for smoking prevalence. Among the participating states, the median smoking prevalence was 24.3 percent, with a range of 14.7 percent (Utah) to 34.2 percent (Kentucky).

Figure 2: PREVALENCE OF CURRENT SMOKING AMONG ADULTS IN CALIFORNIA, BY YEAR AND GENDER: 1984 - 1989 *



	1984	1985	1986	1987	1988	1989
Males	28	26.4	25.5	22.9	24.9	22.3
Females	22.5	24.4	23.3	19.9	20.1	21.4
	n=1,086	n=1,369	n=1,589	n=1,784	n=2,444	n=2,398

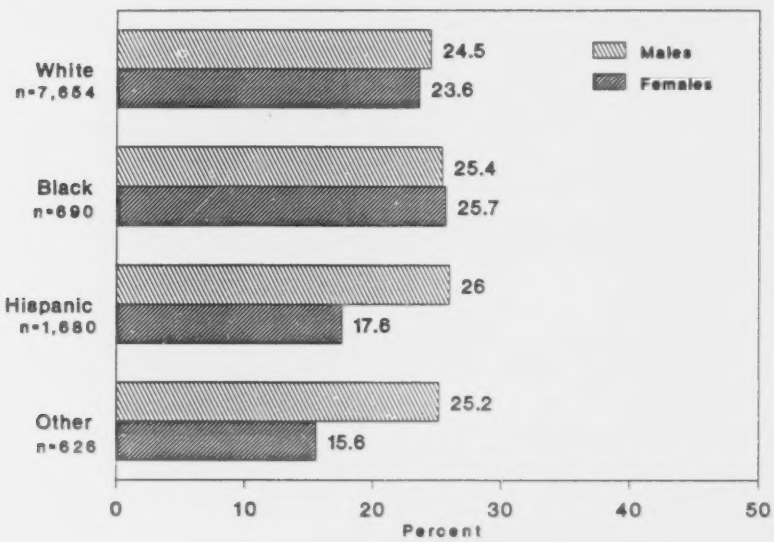
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 2 demonstrates changes from 1984 to 1989 among men and women in the self-reported prevalence of smoking.

- Although the percent of adults in California who smoke appears to be decreasing gradually, this decline appears to be occurring primarily among men. Men showed a statistically significant decrease in smoking from a high of 28.0 percent in 1984 to a low of 22.3 percent in 1989. The percent of women who reported cigarette smoking over this time period decreased from a high of 24.4 percent in 1985 to a low of 19.9 percent in 1987, but then increased to 21.4 percent in 1989. None of the comparisons between years among women are statistically significant.

- In 1989, the difference in smoking prevalence between men and women was less then one percentage point (22.3 percent vs. 21.4 percent, respectively).

Figure 3: PREVALENCE OF CURRENT SMOKING AMONG ADULTS IN CALIFORNIA, BY GENDER AND RACE/ETHNICITY: 1984 - 1989*



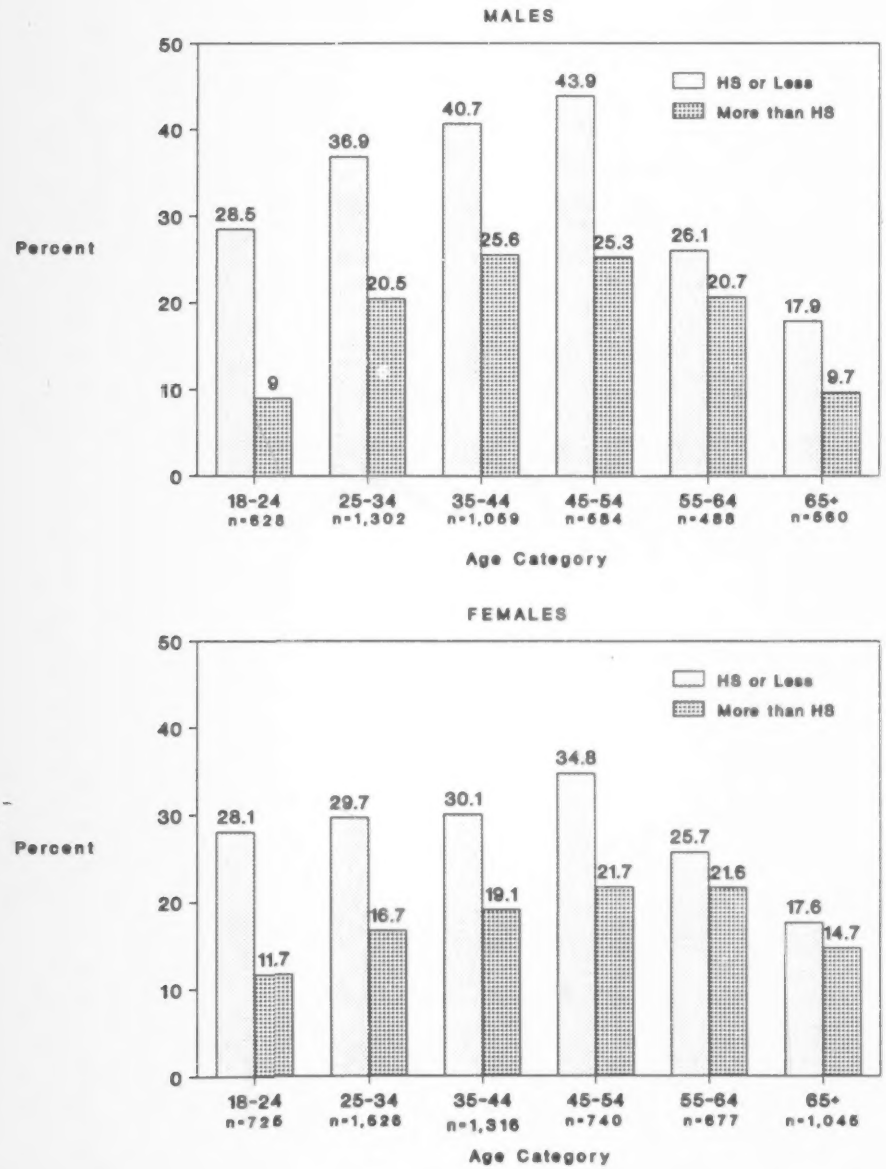
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 3 illustrates the prevalence of cigarette smoking in California by gender and race, aggregating data collected over the six-year period of 1984 to 1989.

- Using aggregated data, adult males are significantly more likely to smoke than females (24.9 percent vs. 22.0 percent, respectively). However, this relationship varies by race/ethnicity. Among whites and blacks, there is little difference in smoking prevalence between men and women; among Hispanics and among those of other race/ethnicity, women are significantly less likely to smoke than men. In addition, as noted above, the gender difference in smoking may be changing over time.

- Among men, differences by race/ethnicity are not statistically significant. However, Hispanic women and women of other race/ethnicity are significantly less likely to smoke than white or black women.

Figure 4: PREVALENCE OF CURRENT SMOKING AMONG ADULTS IN CALIFORNIA, BY GENDER, AGE AND EDUCATION: 1984 - 1989 *



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 4 illustrates the prevalence of cigarette smoking among adults in California over the period 1984 to 1989, by gender, age and educational level.

- Overall, California adults with a high school education or less are more than 1.5 times more likely to smoke than those with education beyond high school (29.2 percent vs. 18.8 percent, respectively). This difference is most pronounced among 18-24 year olds, where men and women with a high school education or less are 3.2 and 2.4 times more likely, respectively, to smoke than their counterparts with more education. Differences in smoking prevalence by educational level exist in all age categories, and are statistically significant among both men and women up to age 55.

- Smoking prevalence tends to increase with age through age group 45-54, and then decline. Among men with education beyond high school, smoking prevalence starts declining earlier, after age group 35-44.

- Among persons aged 45-54 with a high school education or less, more than two out of five men (43.9 percent) and one out of three women (34.8 percent) currently smoke.

4. Summary

- Overall, more than one out of five California adults still smoke. The percent of Californians who smoke appears to be slowly declining, consistent with a national decline of about 0.5 percent per year. However, most of the decline appears to be occurring among men.

- Historically, smoking prevalence has always been higher among men than women. However, this difference appears to be disappearing over time. In 1989, the prevalence of smoking among men and women was almost identical.

- Significant differences in smoking prevalence by race/ethnicity exist among women, but not among men. Black and white women are significantly more likely to smoke than Hispanic women or women of other race/ethnicity.

- Adults in California with a high school education or less are 1.5 times more likely to smoke than adults with education beyond high school. This difference exists at all ages and for both sexes.

- Smoking prevalence is highest among 45-54 year olds.

B. SEAT BELT USE

1. Significance

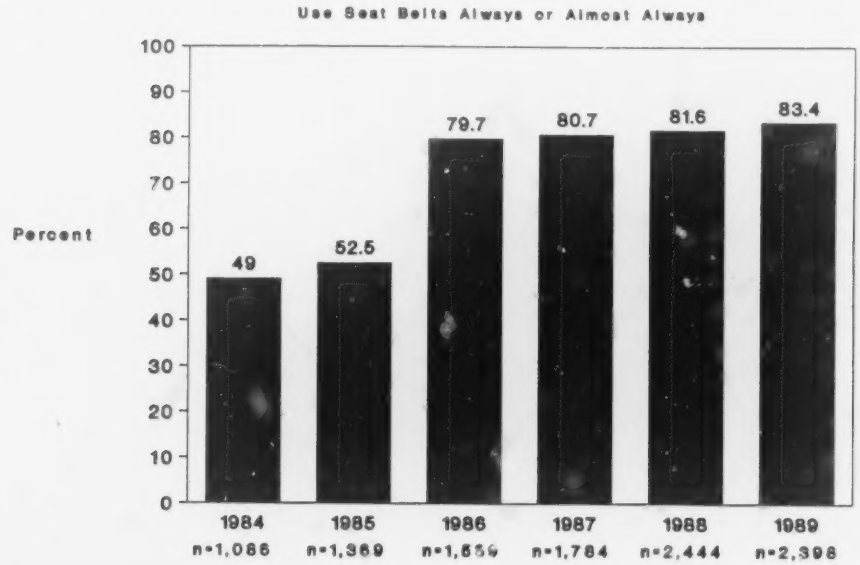
Seat belts minimize the consequences of motor vehicle accidents by restraining the car's occupants and by spreading out the decelerative forces. Seat belts protect the user by allowing deceleration with the vehicle instead of more abruptly when thrown from the car or against an unyielding object inside the car such as the dashboard. When used together, lap and shoulder belts can reduce the likelihood of death or serious injury by about 60 percent.[7]

During 1988, the California Highway Patrol reported seat belt use and nonuse for 3,429 motor vehicle fatalities. Of these victims, 82 percent were not wearing a seat belt.[8]

2. Definition

Respondents are considered regular seat belt users if they report using seat belts always or almost always. The small number (one percent) of respondents who state that they never ride in a car are grouped with the "users," as they are not at risk for failure to use seat belts. Respondents who state that they sometimes, seldom, or never wear seat belts are referred to as infrequent or nonusers.

Figure 5: PREVALENCE OF REGULAR SEAT BELT USE IN CALIFORNIA: 1984 - 1989*



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

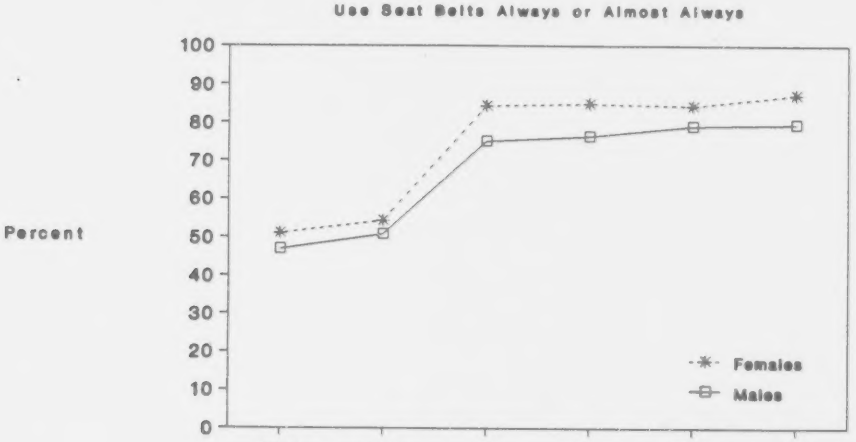
Figure 5 illustrates changes in the regular use of seat belts by adults in California from 1984 to 1989.

- The percent of adults reporting that they always or almost always wear seat belts increased from 49.0 percent in 1984 to 83.4 percent in 1989. This represents a seventy percent increase in regular seat belt use -- a major change in behavior among adults in California.

- The overwhelming majority of this increase took place between 1985 and 1986. This dramatic and statistically significant rise in seat belt use was associated with the enactment of the Mandatory Seat Belt Law in California, which became effective on January 1, 1986. This law requires every driver and passenger over the age of four to wear a seat belt while riding in a private motor vehicle. Small but steady increases in regular seat belt use have continued since 1986.

- Compared to the thirty-six other states participating in the BRFS in 1988, California ranked fifth highest for regular seat belt use. Among the participating states, the median percent of the population regularly using seat belts was 69.9 percent, with a range of 32.6 percent (South Dakota) to 93.5 percent (Hawaii).

Figure 6: PREVALENCE OF REGULAR SEAT BELT USE IN CALIFORNIA, BY YEAR AND GENDER: 1984 - 1989 *



	1984	1985	1986	1987	1988	1989
Females	51	54.3	84.3	84.9	84.1	87.1
Males	46.8	50.7	75	76.4	78.9	79.4
	n=1,088	n=1,369	n=1,689	n=1,784	n=2,444	n=2,398

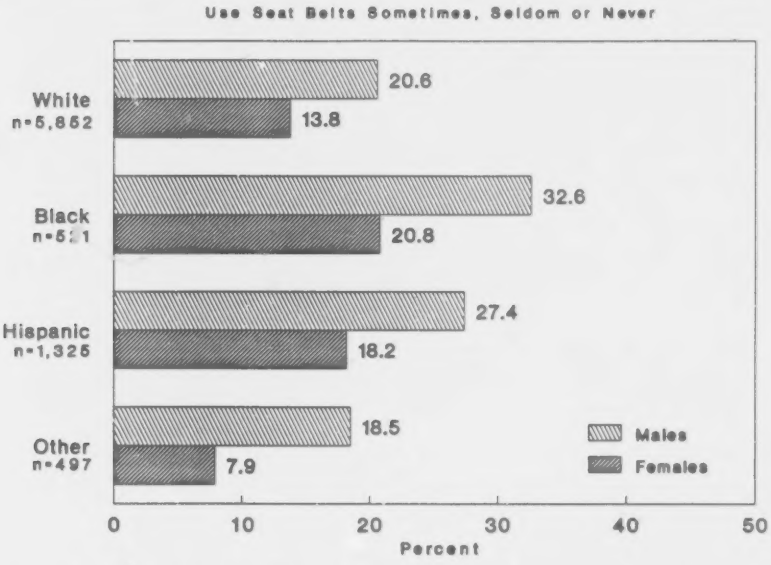
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 6 depicts changes in regular use of seat belts among men and women in California from 1984 to 1989.

- Although both men and women have significantly increased their use of seat belts, the improvement has been somewhat greater among women. Prior to the implementation of the Mandatory Seat Belt Law, the difference in seat belt utilization between men and women was not statistically significant. Since then, women have been significantly more likely to use seat belts than men. In 1989, 87.1 percent of women and 79.4 percent of men reported using seat belts regularly.

The next two figures examine the characteristics of persons who report that they still do not use seat belts or report infrequent use since the enactment of the Mandatory Seat Belt Law in 1986.

Figure 7: PREVALENCE OF IRREGULAR OR NONUSE OF SEAT BELTS IN CALIFORNIA, BY GENDER AND RACE/ETHNICITY: 1986 - 1989 *



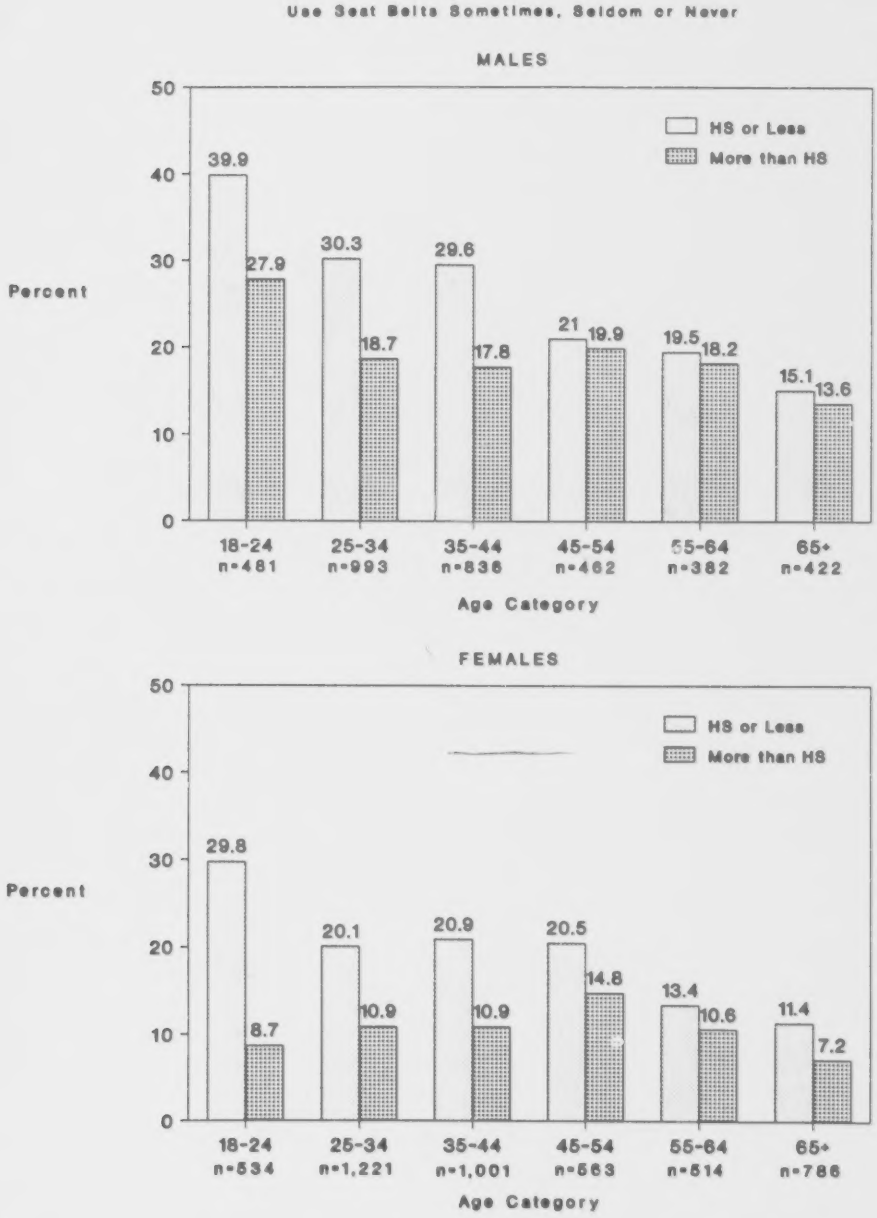
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 7 illustrates infrequent/nonuse of seat belts by gender and race/ethnicity, aggregating data from 1986 through 1989.

- Since enactment of the Mandatory Seat Belt Law in 1986, males have been 1.5 times more likely than females to be infrequent/nonusers of seat belts, a statistically significant difference (22.6 percent vs. 14.6 percent, respectively). This difference exists between men and women within each race/ethnicity group.

- Overall, blacks and Hispanics are significantly more likely than whites and those of other race/ethnicity to be infrequent/nonusers. Respective rates are 26.4 percent, 22.8 percent, 17.1 percent, and 13.0 percent. The race/ethnicity differences exist for both men and women.

Figure 8: PREVALENCE OF IRREGULAR OR NONUSE OF SEAT BELTS IN CALIFORNIA, BY GENDER, AGE AND EDUCATION: 1986 - 1989 *



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 8 demonstrates infrequent/nonuse of seat belts by gender, age and education, aggregating data from 1986 through 1989.

- Adults with a high school education or less are 1.5 times more likely than those with more education to still report infrequent/nonuse of seat belts (22.8 percent vs. 15.1 percent, respectively). This difference by educational level exists for men and women, and is statistically significant within each age category up to age 45; after age 45, differences in seat belt use by education are not statistically significant.

- Infrequent/nonuse of seat belts tends to decline with age. This relationship is particularly strong among men with a high school education or less, among whom infrequent/nonuse decreases from 39.9 percent among 18-24 year olds to 15.1 percent among males aged 65 or older. Among men with education beyond high school, infrequent/nonuse of seat belts remains fairly constant after age 24; among women with education beyond high school, infrequent/nonuse of seat belts remains fairly constant with age.

4. Summary

- Seat belt use increased dramatically following the implementation of the Mandatory Seat Belt Law on January 1, 1986.

- Men are 1.5 times more likely than women to be infrequent/nonusers of seat belts.

- Blacks and Hispanics are more likely to be infrequent/nonusers than whites or those of other race/ethnicity. This difference is statistically significant among men, but not among women.

- Adults with a high school education or less are 1.5 times more likely than those with education beyond high school to be infrequent/nonusers of seat belts.

- Young adults (18 to 24 years old) are the most likely to be infrequent/nonusers of seat belts.

C. PHYSICAL EXERCISE OUTSIDE OF WORK

1. Significance

Data indicate that physical activity impacts favorably on a number of conditions including cardiovascular disease, hypertension, osteoporosis, diabetes, depression, and anxiety.

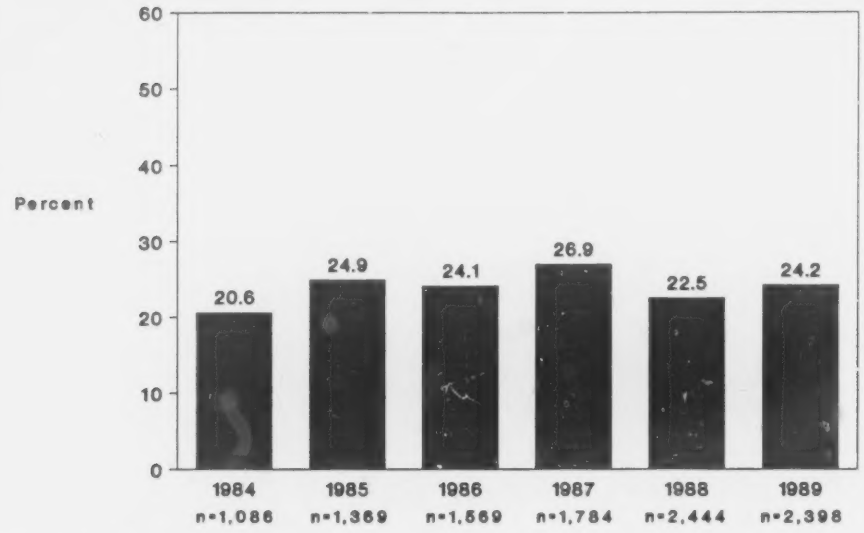
Moderate to vigorous physical activity performed regularly may reduce the risk of coronary artery disease. Research also indicates that such physical activity aids in the control of hypertension. For the individual with diabetes, regular exercise helps to control blood glucose levels. Morbidity from osteoporosis may be reduced by weight-bearing activities such as walking and running, which increase bone density.

Besides affecting physical condition, exercise has an effect on our mental well being. Exercise appears to have an antidepressant effect as well as being able to temporarily reduce anxiety.

2. Definition

Respondents are asked if they participated in the past month in any physical activities or exercise outside of work duties, such as running, calisthenics, golf, gardening, or walking for exercise. Those who respond "no" are considered to have had no exercise outside of work in the past month.

Figure 9: PERCENT OF CALIFORNIA ADULTS WHO DO NOT EXERCISE OUTSIDE OF WORK: 1984 - 1989 *



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

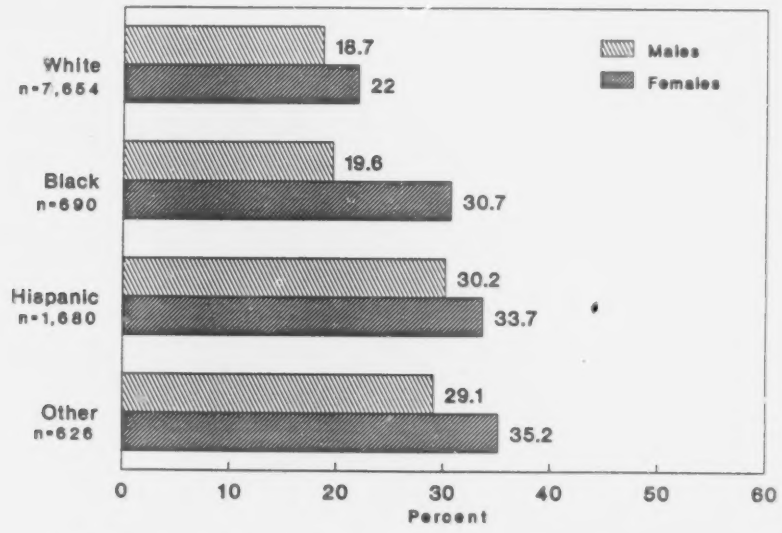
Figure 9 depicts trends in the percent of respondents who report that they have not participated in any physical activities or exercise outside of regular work duties in the last month such as running, calisthenics, golf, gardening or walking.

- The percent of California adults who failed to participate in any physical activity outside of work varied from a low of 20.6 percent in 1984 to a high of 26.9 percent in 1987. Although these two years are significantly different, the indication of a trend towards increasing inactivity will need to be examined with additional years of data collection.

- Over the six years of data collection, an average of 23.9 percent, or nearly one out of four California adults, reported no exercise outside of work.

- Data from other states participating in the BRFS are not available for exercise defined in this manner.

Figure 10: PERCENT OF CALIFORNIA ADULTS WHO DO NOT EXERCISE OUTSIDE OF WORK, BY GENDER AND RACE/ETHNICITY: 1984 - 1989 *



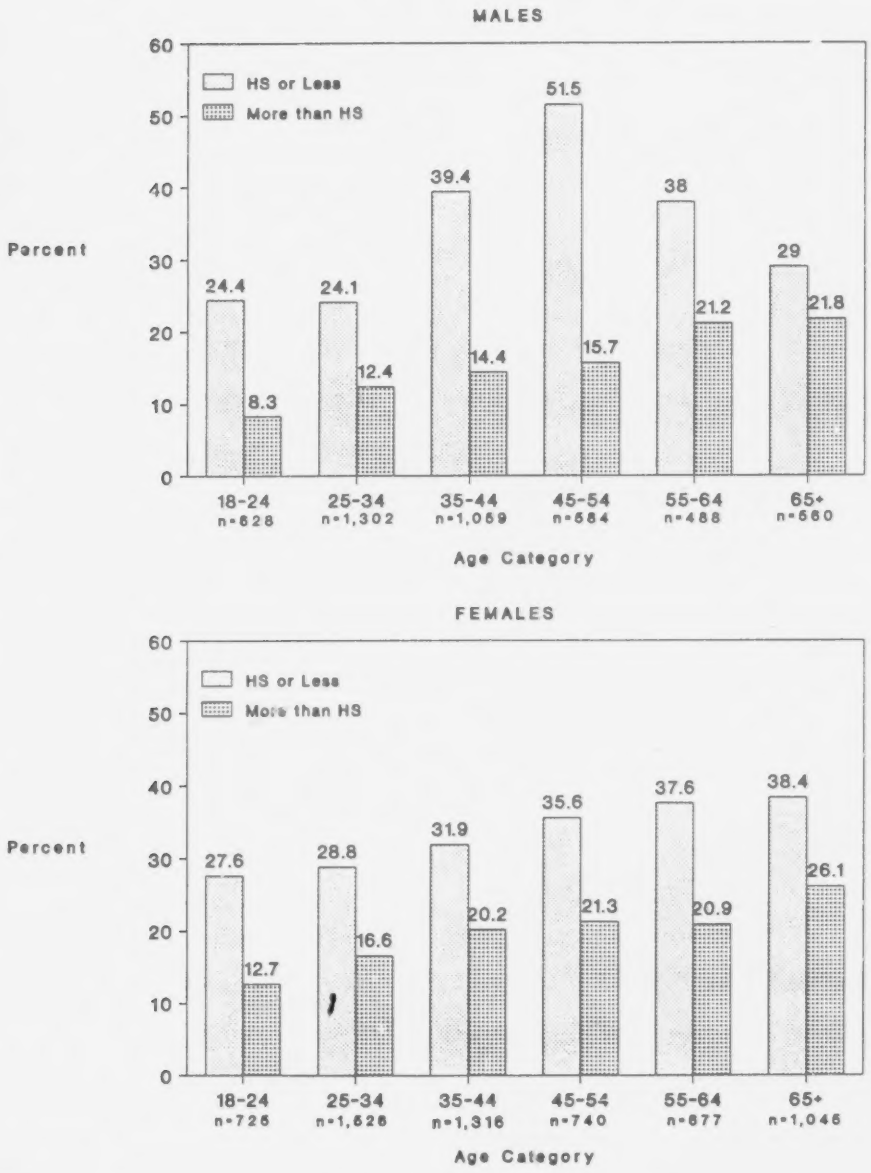
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1980 California population. California Department of Health Services, July 1990.

Figure 10 illustrates the percentage of California adults who received no exercise outside of work, by gender and race, aggregating data collected over the six-year period 1984-1989.

- Women are significantly more likely not to exercise outside of work than men (25.8 percent vs. 21.9 percent, respectively). This difference exists within each race/ethnicity group, but is especially marked for blacks. Black women are 1.5 times more likely than black men not to exercise outside of work (30.7 percent vs. 19.6 percent, respectively).

- Blacks, Hispanics and those of other race/ethnicity are significantly more likely than whites to not participate in physical activity or exercise outside of work. Respective rates are 25.4 percent, 31.9 percent, 32.3 percent and 20.4 percent. This difference exists for men and women. Nearly one out of three nonwhite women report that they receive no exercise outside of work.

Figure 11: PERCENT OF CALIFORNIA ADULTS WHO DO NOT EXERCISE OUTSIDE OF WORK, BY GENDER, AGE AND EDUCATION: 1984 - 1989*



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 11 shows lack of exercise outside of work by gender, age and education, aggregating data from 1984 through 1989.

- Adults with a high school education or less are nearly two times more likely than those with more education to report no exercise outside of work (32.6 percent vs. 17.0 percent, respectively). This difference exists and is statistically significant for both men and women within each gender and age-specific category, except among men over 65 years of age.

- Inactivity tends to increase with age; 18.9 percent of all 18-24 year olds report no exercise outside of work, compared to 30.1 percent of all adults 65 years and older. For men with a high school education or less, lack of physical exercise is most prevalent among 45-54 year olds, and decreases in the two older age categories. For men with education beyond high school, lack of exercise increase steadily in prevalence until the 55-64 age category.

4. Summary

- Nearly one out of four adults in California does not participate in any physical activities or exercise outside of work. This proportion has not changed substantially from 1984 to 1989.

- Blacks, Hispanics and those of other race/ethnicity are less likely to exercise outside of work than whites.

- Education is strongly associated with physical exercise outside of work; those with a high school education or less are nearly two times more likely not to exercise than those with more education.

- Except among males with a high school education or less, inactivity increases steadily with age; those aged 65 or older are approximately 1.5 times as likely as 18-24 year olds to report no activity outside of work.

D. OVERWEIGHT BASED ON BODY MASS INDEX

1. Significance

While overweight is not equivalent to obesity, for most individuals it provides an approximation of body fatness. Obesity is linked to hypertension, high serum cholesterol levels, Type II diabetes mellitus and cancers of the colon, rectum, prostate, gall bladder, breast, uterus, and ovaries, as well as degenerative arthritis.

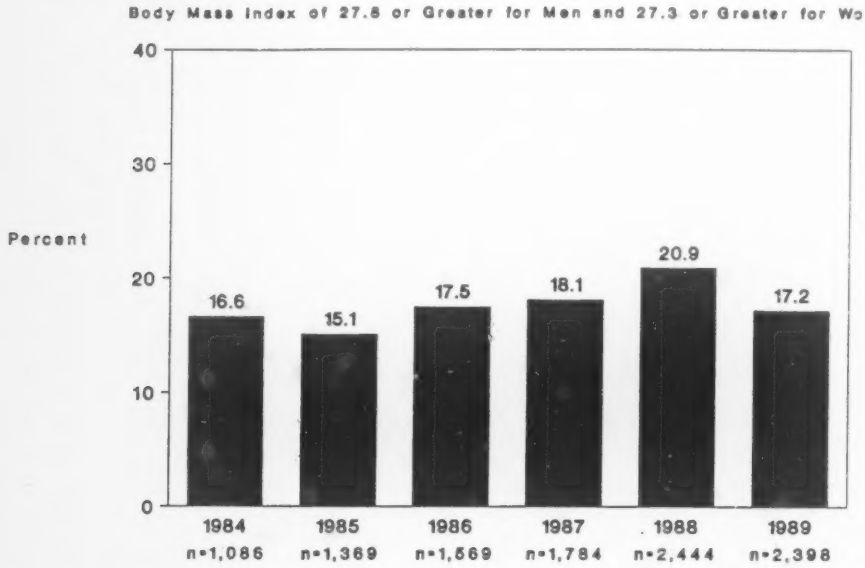
2. Definition

One measure of overweight is based on the body mass index (BMI), which is calculated from the reported height and weight of the individual according to the following formula:

$$\text{weight in kg}/[(\text{height in m})^2]$$

BMI was chosen to assess overweight as it is highly correlated with body weight and is minimally correlated with height.[9] Male respondents were considered overweight if they had a BMI of 27.8 or higher, while females were considered overweight if they had a BMI of 27.3 or higher. These values represent the sex-specific 85th percentile of BMI for U.S. adults 20 and 29 years of age as determined by the Second National Health and Nutrition Examination Survey (NHANES-II), conducted by the National Center for Health Statistics between 1976 and 1980.

Figure 12: PREVALENCE OF OVERWEIGHT AMONG ADULTS IN CALIFORNIA: 1984 - 1989 *



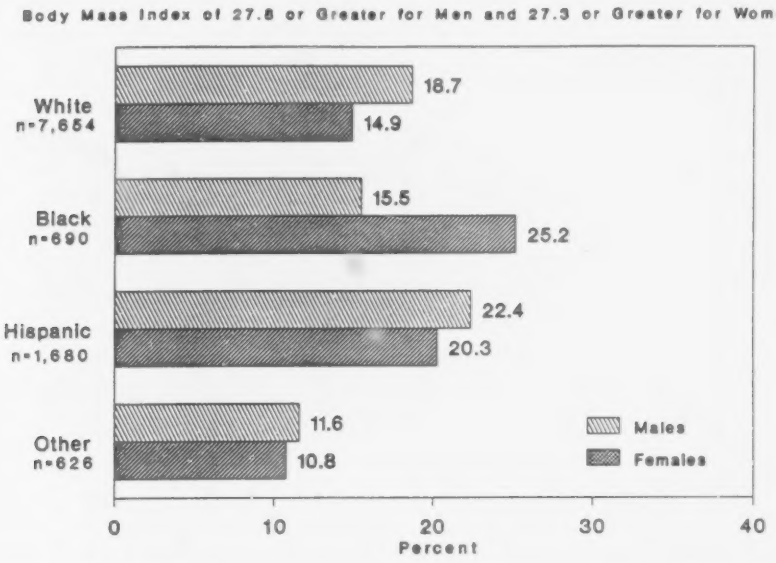
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 12 depicts changes from 1984 to 1989 in the percent of California adults who are overweight based on BMI.

- Overall, 17.4 percent of California adults are considered overweight based on BMI. Over the six years of data collection, the prevalence of overweight varied from a low of 15.1 percent in 1985 to a high of 20.9 percent in 1988. The estimate for 1988 is significantly higher than each of the other years, but the difference between 1984 and 1989 is not statistically significant. The indication of a trend towards increasing overweight will need to be verified with additional years of data collection.

- Compared to the thirty-six other states participating in the BRFS in 1988, California ranked nineteenth (at the median) for prevalence of overweight based on BMI. Among the participating states, the range was from 14.5 percent (Montana) to 28.0 percent (Wisconsin).

Figure 13: PREVALENCE OF OVERWEIGHT AMONG ADULTS IN CALIFORNIA, BY GENDER AND RACE/ETHNICITY: 1984 - 1989 *



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

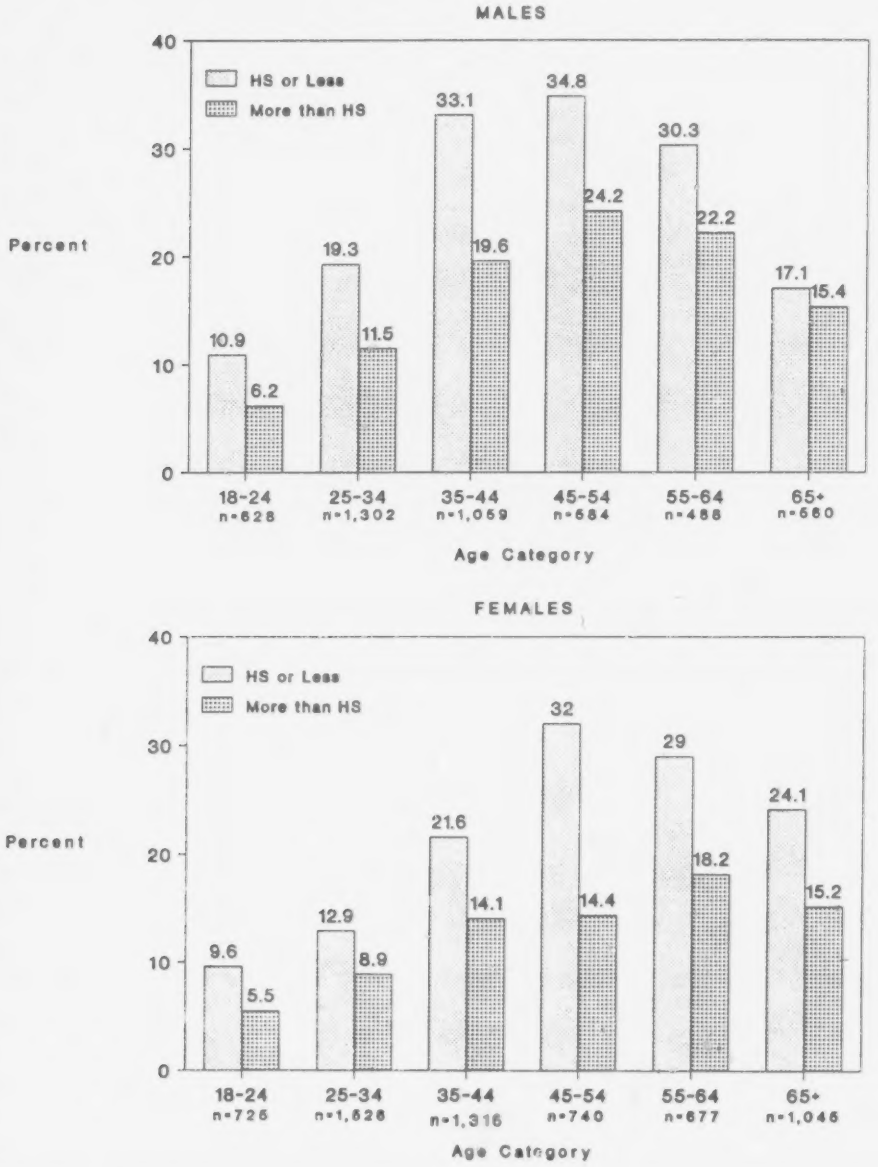
Figure 13 demonstrates the prevalence of overweight in California by gender and race aggregating data over the six-year period 1984-1989.

- Overall, men are significantly more likely than women to be overweight based on BMI (18.6 percent vs. 16.3 percent, respectively), but this relationship varies by race/ethnicity. Among whites and Hispanics, men are more likely to be overweight than women. This difference is statistically significant for white men and women (18.7 percent vs. 14.9 percent, respectively), but not for Hispanic men and women (22.4 percent vs. 20.3 percent, respectively). However, black women are 1.6 times more likely to be overweight than black men (25.2 percent vs. 15.5 percent, respectively).

- Respondents of other race/ethnicity are significantly less likely than whites, blacks or Hispanics to be overweight based on BMI.

Figure 14: PREVALENCE OF OVERWEIGHT AMONG ADULTS IN CALIFORNIA, BY GENDER, AGE AND EDUCATION: 1984 - 1989*

Body Mass Index of 27.8 or Greater for Men and 27.3 or Greater for Women



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data opf adults aged 18 and older, weighted to the age-, race-,and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 14 demonstrates the prevalence of overweight among adults in California by gender, age and educational level.

- Education is a strong predictor of overweight, especially among women. Women with a high school education or less are 1.7 times more likely to be overweight than women with more education (20.8 percent vs. 12.2 percent, respectively). The comparison by education is statistically significant for women in all age categories except for 18-24 year olds. Men with a high school education or less are 1.3 times more likely to be overweight than men with more education (21.9 percent vs. 16.4 percent, respectively). The comparison by education is statistically significant for men in age categories 25 through 54.

- Overweight tends to increase with age up to 45-54 years, increasing from 8.3 percent of 18-24 year olds to 25.4 percent among 45-54 year olds. After age 54, the prevalence of overweight tends to decrease. This pattern holds true except for women with education beyond high school, for whom the prevalence of overweight based on BMI stays fairly constant between ages 35 to 54, and then increases in age category 55-64 years old.

- One out of three men and women aged 45-54 with a high school education or less are overweight based on BMI (34.8 percent and 32.0 percent, respectively).

4. Summary

- Overall, one out of six California adults is overweight based on BMI. There is some indication that the prevalence of overweight may be increasing over time, but further data collection will be required to determine the stability of the trend.

- Men are somewhat more likely to be overweight than women, except among blacks, where women are 1.6 times more likely to be overweight than men.

- Adults with a high school education or less are 1.5 times more likely to be overweight than those with more education.

- Except for women with education beyond high school, the prevalence of overweight increases sharply through age category 45-54, and then decreases.

E. HYPERTENSION

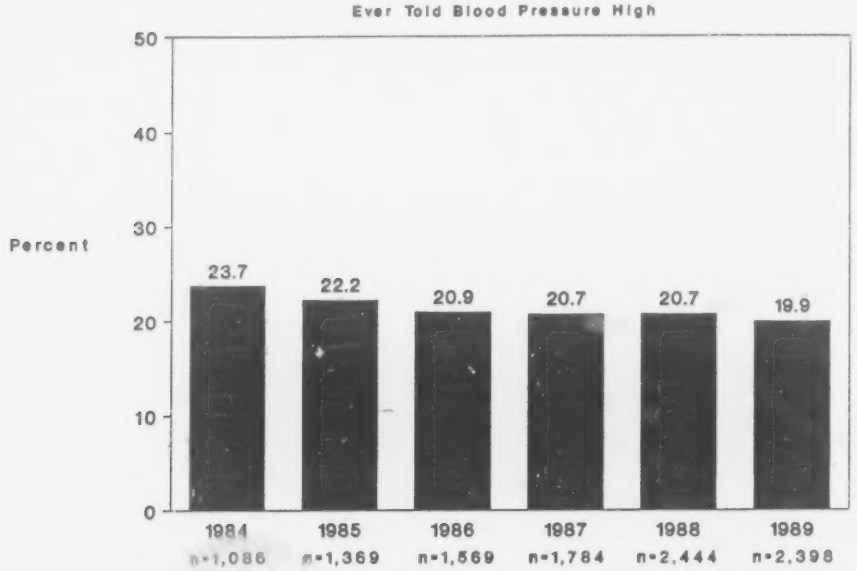
1. Significance

Hypertension is the most prevalent of all cardiovascular diseases in the United States, affecting an estimated 58 million Americans. It is a major risk factor for the development of coronary artery disease, congestive heart failure, stroke, and kidney disease. Hypertension is known as the silent killer because few if any symptoms are present. The cause of high blood pressure is poorly understood for 90 percent of cases. Although it is a chronic and a life-long disease, it can nearly always be controlled with appropriate treatment.

2. Definition

Hypertensive respondents are those who state they have ever been told that they have high blood pressure by a doctor, nurse, or other health care professional.

Figure 15: PREVALENCE OF HYPERTENSION AMONG CALIFORNIA ADULTS: 1984 - 1989 *



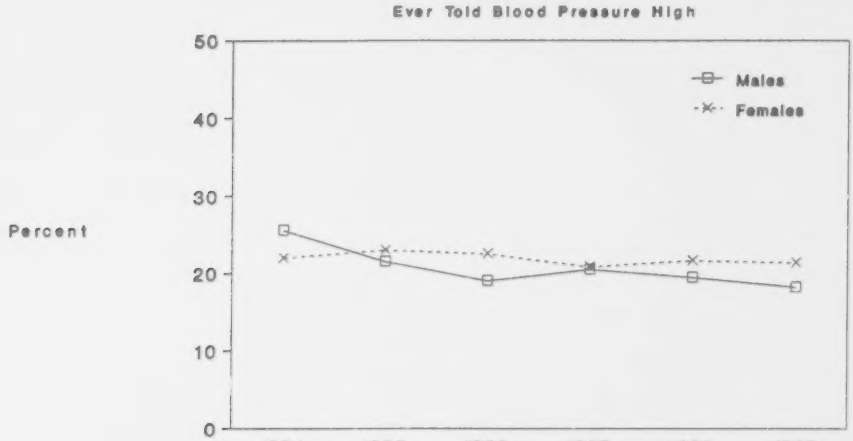
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 15 displays the trend in the percent of California adults who report ever having been told they have high blood pressure by a doctor, nurse or other health professional.

- Over the six-year period, 21.0 percent of Californians reported that they had ever been told they were hypertensive. There has been a modest and statistically signif cant decline in the prevalence of reported hypertension from 23.7 percent in 1984 to 19.9 percent in 1989. The reasons for this decline are unclear. It may reflect a real decline in the prevalence of hypertension in California, or may be the result of other factors, such as decreased access to blood pressure screening among certain subgroups in the population or changes in the accuracy of response to questions on the BRFS.

- Compared to the thirty-six other states participating in the BRFS in 1988, California ranked tenth lowest for prevalence of hypertension by this definition. Among participating states, the median prevalence of hypertension was 21.8 percent, with a range of 14.9 percent (Montana) to 26.2 percent (Wisconsin).

Figure 16: PREVALENCE OF HYPERTENSION AMONG CALIFORNIA ADULTS, BY YEAR AND GENDER: 1984 - 1989 *



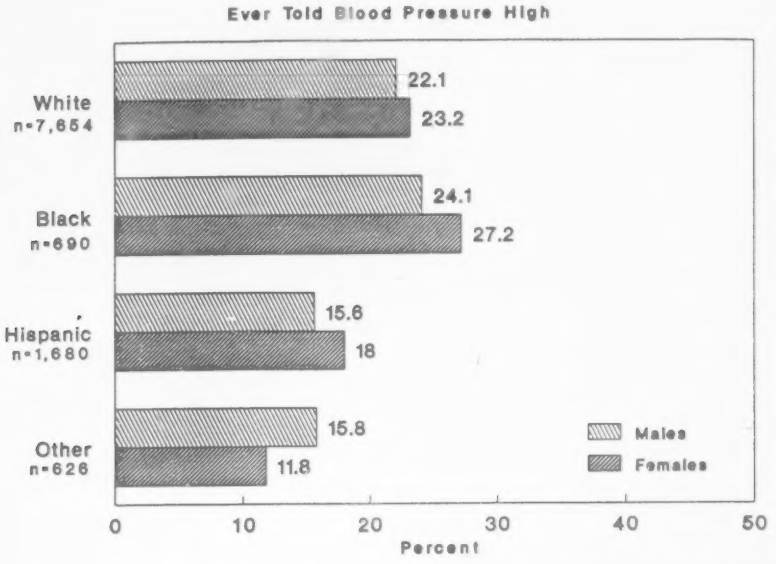
	1984	1985	1986	1987	1988	1989
Males	25.6	21.5	19.1	20.5	19.5	18.2
Females	22	23	22.6	20.8	21.7	21.4
	n=1,086	n=1,369	n=1,569	n=1,784	n=2,444	n=2,398

* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 16 demonstrates changes from 1984 to 1989 for men and women in the prevalence of reported hypertension.

- Over the six-year period, the prevalence of hypertension in men declined from 25.6 percent in 1984 to 18.2 percent in 1989, while the prevalence of hypertension in women remained fairly constant. The reason for this gender-specific decrease is unknown.

Figure 17: PREVALENCE OF HYPERTENSION AMONG CALIFORNIA ADULTS, BY GENDER AND RACE/ETHNICITY: 1984 - 1989 *



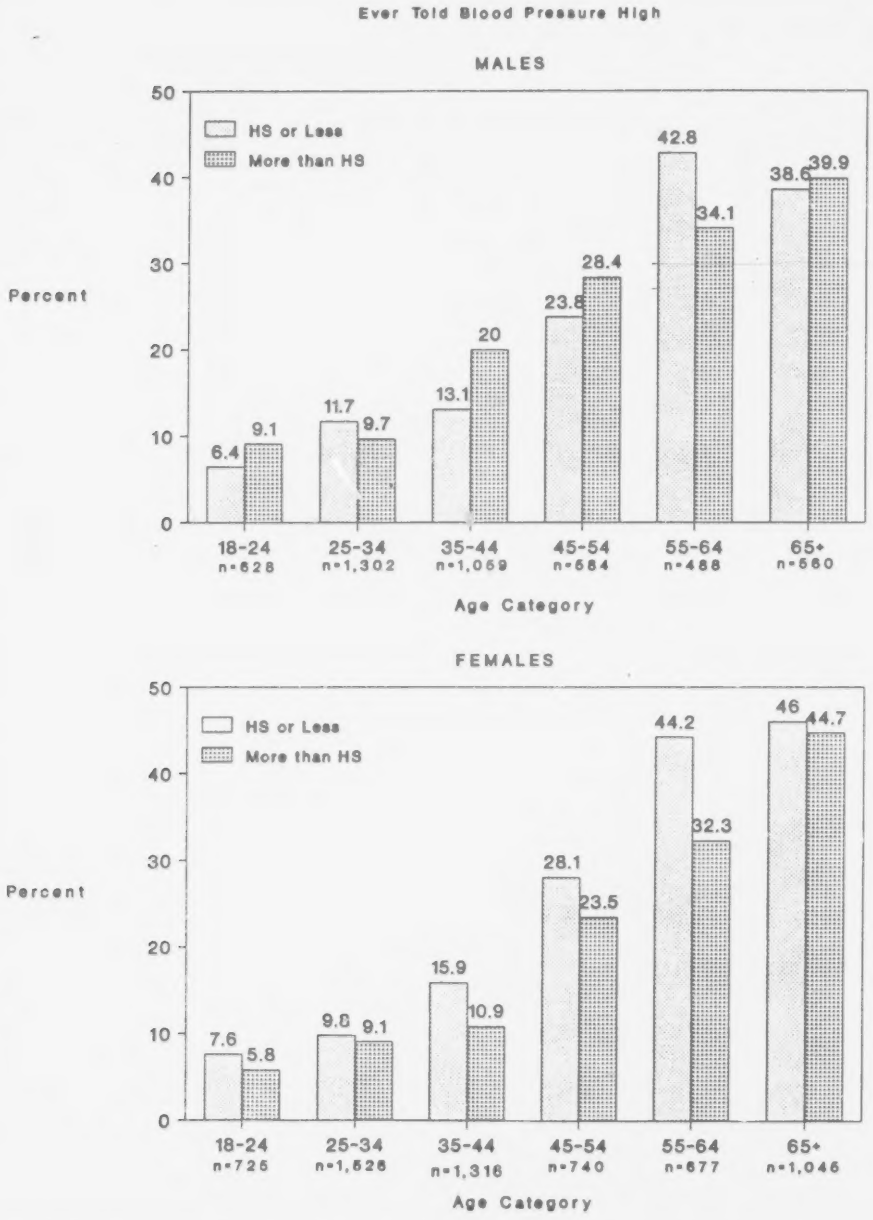
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1988 California population. California Department of Health Services, July 1990.

Figure 17 illustrates the prevalence of reported hypertension by gender and race, aggregating data over the six-year period 1984-1989.

- Overall, males and females are about equally likely to report having been told they have high blood pressure (20.5 percent vs. 21.6 percent, respectively).

- There are differences in hypertension by race. Blacks (25.7 percent) and whites (22.7 percent) are significantly more likely to have ever been told they were hypertensive than Hispanics (16.8 percent) or persons of other race/ethnicity (13.7 percent). This relationship holds true among both males and females.

Figure 18: PREVALENCE OF HYPERTENSION AMONG CALIFORNIA ADULTS, BY GENDER, AGE AND EDUCATION: 1984 - 1989 *



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1988 California population. California Department of Health Services, July 1990.

Figure 18 demonstrates reported hypertension among California adults over the period 1984-1989 by gender, ten-year age category and educational level.

- The prevalence of hypertension increases dramatically with age, rising from less than ten percent of 18-24 year olds to over 40 percent in those over 65.

- This sharp increase in hypertension with age is evident for both men and women and for both educational groups.

- For men, there is no clear association between educational level and hypertension. Overall, 20.1 percent of men with a high school education or less are hypertensive, compared to 20.8 percent of men with education beyond high school.

- However, there is a statistically significant association between educational level and hypertension among women. Overall, 25.3 percent of women with a high school education or less are hypertensive, compared to 18.1 percent of women with education beyond high school. An increased prevalence of hypertension among women with less education is evident among all age categories, although the age-specific comparison is statistically significant only for women aged 35-44 and 55-64.

- Females aged 65 or older with a high school education or less are most likely to have ever been told they had high blood pressure (46.0 percent).

4. Summary

- Overall, one out of five adults in California reports having been told on at least one occasion that they have high blood pressure. By this definition, the prevalence of hypertension appears to be gradually declining.

- Blacks are the most likely to have been told they are hypertensive. The prevalence of hypertension is significantly higher among both blacks and whites than among Hispanics and persons of other race/ethnicity.

- The prevalence of hypertension increases dramatically with age; persons over age 65 are six times more likely to have been told they have high blood pressure than 18-24 year olds.

- The prevalence of hypertension is similar for men and women in each year of the study period.

- For men, there is no association between hypertension and educational level. However, women with a high school education or less are somewhat more likely to be hypertensive than those with more education.

F. CHRONIC DRINKING

1. Significance

Alcohol abuse results in a myriad of adverse medical and social consequences. It is a major risk factor for the development of cirrhosis of the liver, alcoholic hepatitis, and fatty liver. Chronic pancreatitis, gastritis, cardiomyopathy, impotence, and cancers of the mouth, tongue, pharynx, and esophagus are related to alcohol abuse.

During pregnancy, heavy alcohol use may result in children born with fetal alcohol syndrome (FAS). The effects of FAS may include impairment of intellectual and motor functions, low birth weight, short body, malformation of the face and abnormalities in the cardiac, urogenital and skeletal systems.

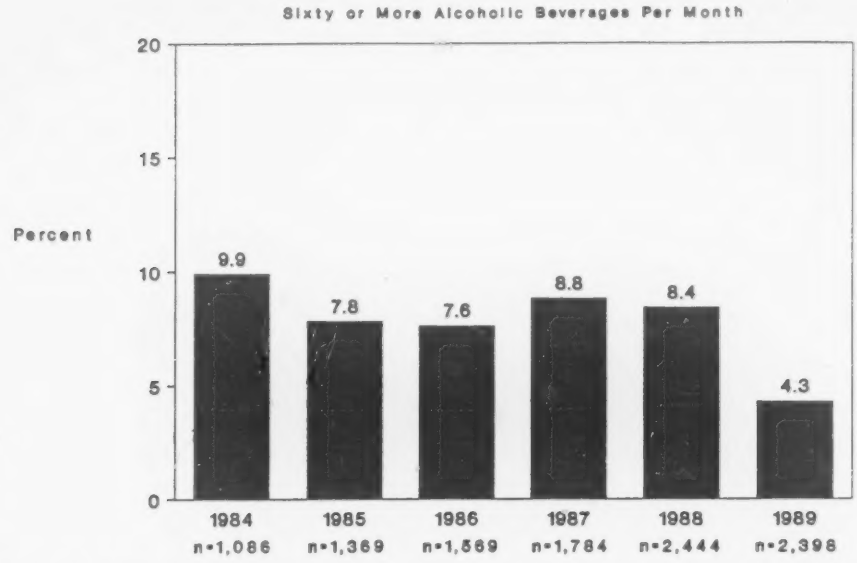
Alcohol abuse is implicated in a large proportion of violent acts, including rape, assault, robbery, and deaths due to fire. Alcohol abuse is especially destructive to families and frequently leads to spouse and child abuse as well as economic stress, divorce, and negative role modeling for children.

2. Definition

Participants in the BRFS are asked a series of questions concerning alcohol consumption during the previous month (see Appendix A). The average number of alcoholic beverages consumed per month is calculated from answers to these questions. Respondents who report drinking sixty or more alcoholic beverages per month are considered chronic drinkers.

From 1984 through 1988, respondents were asked separate questions concerning the consumption of beer, wine and liquor. In 1989, the questions were consolidated to ask about the consumption of all types of alcoholic beverages.

Figure 19: PREVALENCE OF CHRONIC DRINKING IN CALIFORNIA: 1984 - 1989*



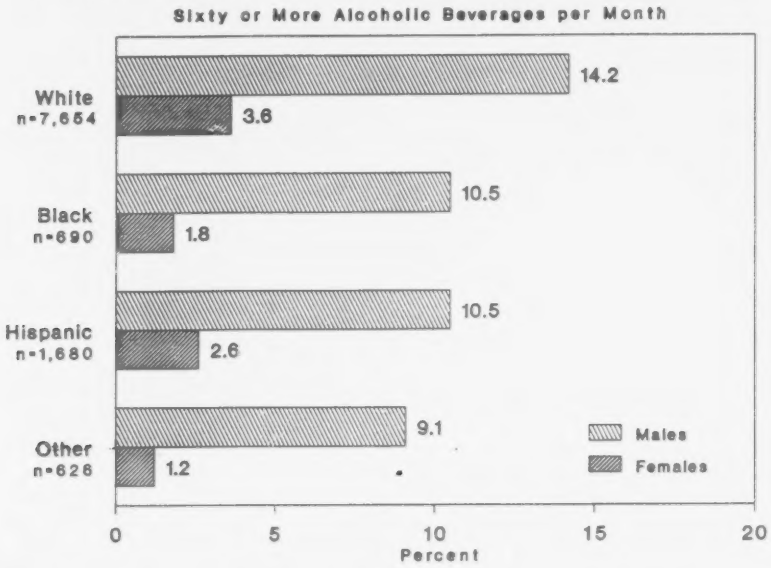
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 19 illustrates changes over time in the percent of adults in California who report having consumed sixty or more alcoholic beverages in the past month.

- Over the six years of data collection, 7.8 percent of California adults reported chronic drinking. This estimate varied from a low of 4.3 percent in 1989 to a high of 9.9 percent in 1984. The prevalence of chronic drinking reported in 1989 was significantly lower than each other year of data collection. This decrease may have resulted from changes in the questions used to obtain information on consumption of alcoholic beverages (see Definition section above), and may not reflect a true decline in chronic drinking in California.

- Compared to the thirty-six other states participating in the BRFS in 1988, California ranked sixth highest for prevalence of chronic drinking. Among these 37 states, the median prevalence of chronic drinking was 5.8 percent, with a range of 3.3 percent (North Dakota) to 10.8 percent (New Hampshire).

Figure 20: PREVALENCE OF CHRONIC DRINKING IN CALIFORNIA, BY GENDER AND RACE/ETHNICITY: 1984 - 1989 *



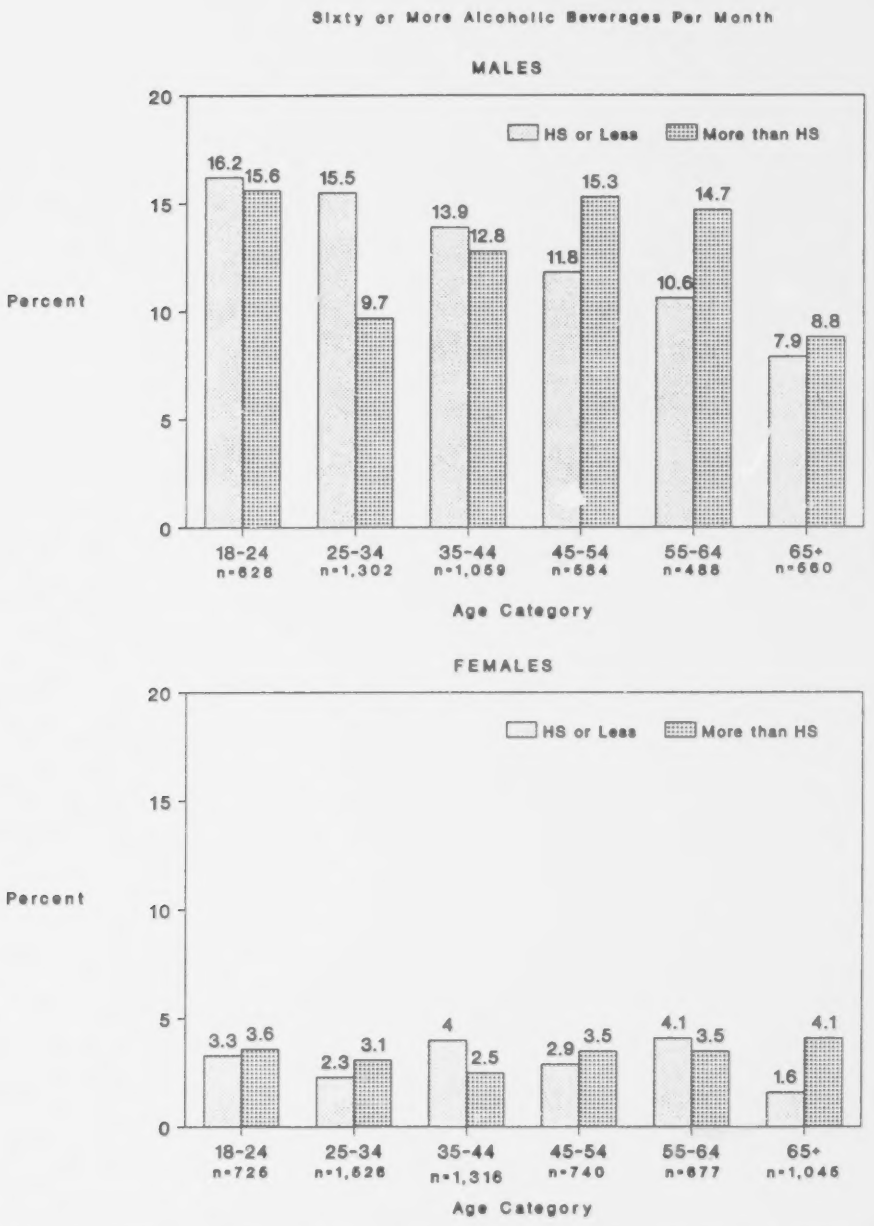
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 20 demonstrates chronic drinking among California adults by gender and race/ethnicity, aggregating data collected over the six-year period 1984-1989.

- Males are more than four times as likely as females to report chronic drinking (12.8 percent vs. 3.1 percent, respectively). Nearly one out of eight men report drinking more than sixty alcoholic beverages per month, compared to one out of 32 women. This sharp gender difference is statistically significant within each of the four race/ethnicity groups.

- White men and women are more likely to report chronic drinking than their counterparts in the other race/ethnicity groups. Overall, the difference is statistically significant when comparing whites to Hispanics and to those of other race/ethnicity.

Figure 21: PREVALENCE OF CHRONIC DRINKING IN CALIFORNIA BY GENDER, AGE AND EDUCATION: 1984 - 1989 *



* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 21 illustrates self-reported chronic drinking among California adults over the period 1984-1989 by gender, ten-year age category and educational level.

- Education and age are not strong predictors of chronic drinking. Among men aged 25-34, those with a high school education or less are more likely to report chronic drinking than those with more education (15.5 percent vs. 9.8 percent, respectively). However, for men aged 45 and older, those with education beyond high school are more likely to report chronic drinking.

- For men with a high school education or less, self-reported chronic drinking decreases steadily with age, declining from 16.2 percent of males aged 18-24 to 7.9 percent of males aged 65 years and older. This steady decline in chronic drinking with age is not apparent for men with education beyond high school or for women.

- The highest prevalence of chronic drinking is among males aged 18-24, where over sixteen percent, or nearly one out of six, report chronic drinking.

4. Summary

- Two out of twenty-five adults in California report drinking sixty or more alcoholic beverages per month. This places California in the upper quartile when comparing the prevalence of chronic drinking to the other states participating in the BRFS.

- Males are four times more likely to report chronic drinking than women.

- Whites are somewhat more likely to report chronic drinking than other race/ethnicity groups.

- Educational level is not strongly associated with self-reported chronic drinking. For men, the prevalence of self-reported chronic drinking tends to decrease with age. For women, the prevalence remains fairly constant with age.

G. DRINKING AND DRIVING

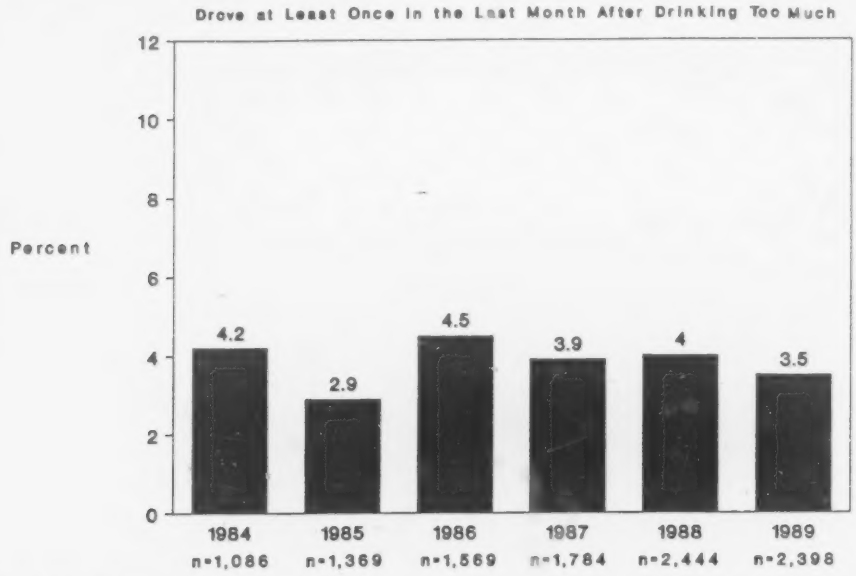
1. Significance

Even moderate amounts of alcohol can result in significant impairment of performance in driving, flying, and other activities requiring complex psychomotor skills. The California Highway Patrol reported that during 1988, 41,868 motor vehicle accidents occurred involving drinking drivers. This represents nearly ten percent of all motor vehicle accidents occurring that year. In 1988, 67 percent of drinking drivers involved in motor vehicle accidents were between the ages of 18 and 34.

2. Definition

Drinking drivers are those respondents who indicated they have driven when they have had too much to drink on at least one occasion in the month preceding the interview.

Figure 22: PREVALENCE OF DRINKING AND DRIVING IN CALIFORNIA: 1984 - 1989*



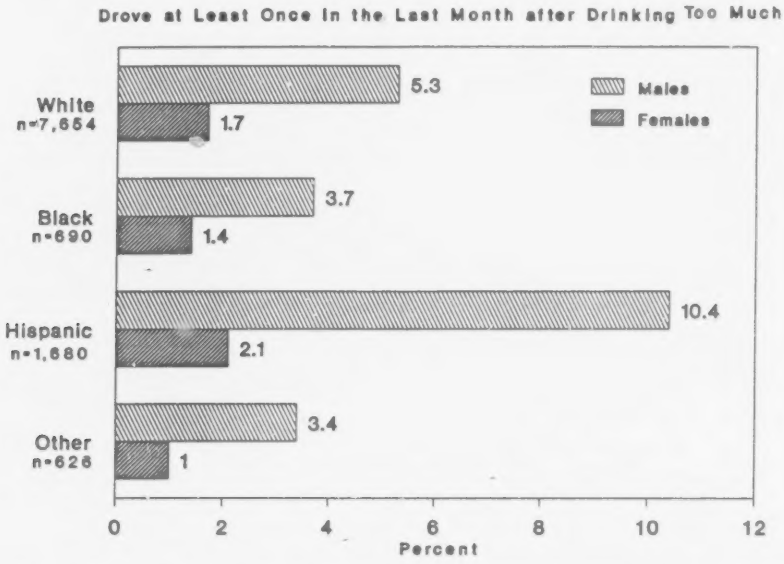
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 22 demonstrates changes over time in the estimated percent of California adults reporting to have driven one or more times in the preceding month after having had too much to drink.

- Over the six years of data collection, 3.8 percent of California adults reported drinking and driving. This estimate varied from a low of 2.9 percent in 1985 to a high of 4.5 percent in 1986. The difference between these two years is statistically significant, but no trends are apparent over the six years of data collection.

- Compared to the thirty-six other states participating in the BRFS in 1988, California ranked tenth highest for prevalence of self-reported drinking and driving. Among these 37 states, the median prevalence of drinking and driving was 3.2 percent, with a range of 1.4 percent (Kentucky) to 8.9 percent (Montana).

Figure 23: PREVALENCE OF DRINKING AND DRIVING IN CALIFORNIA, BY GENDER AND RACE/ETHNICITY: 1984 - 1989 *



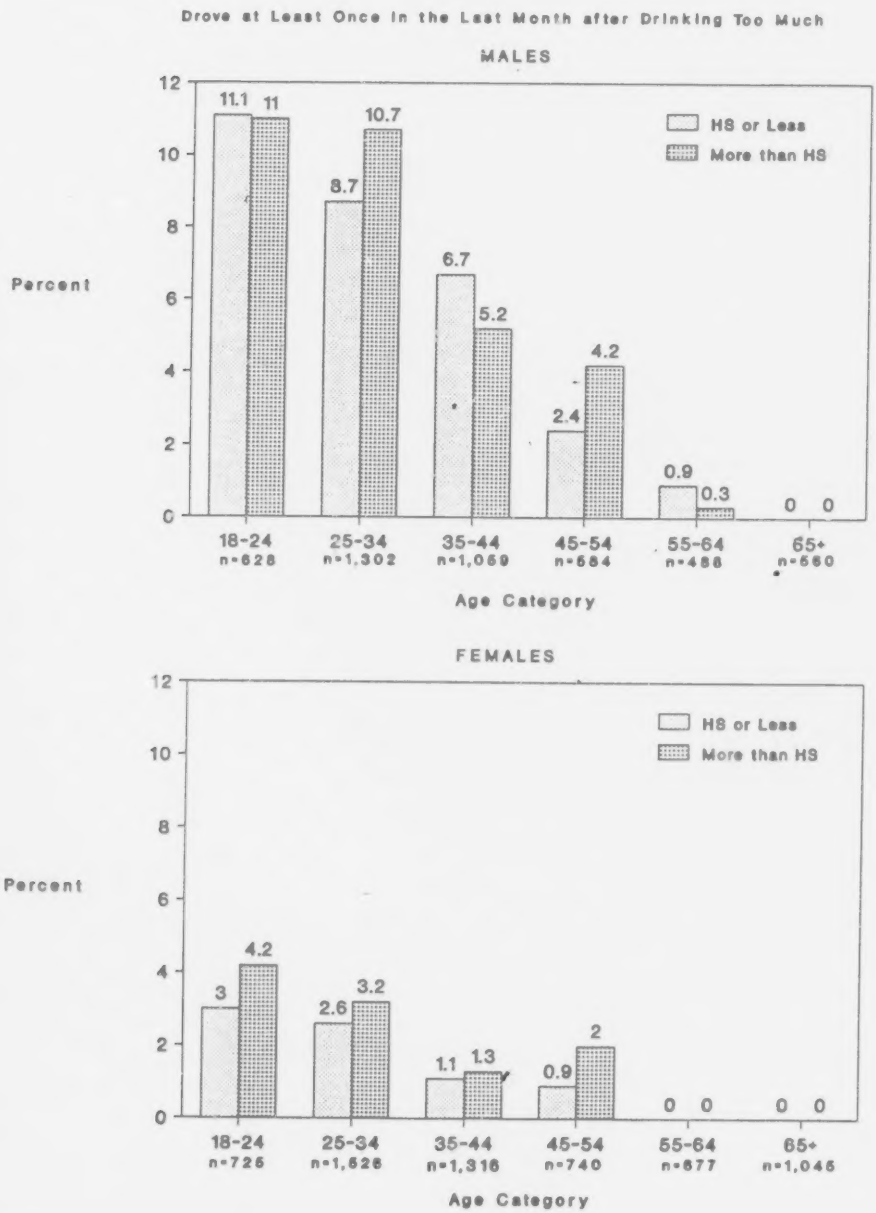
* From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1986 California population. California Department of Health Services, July 1990.

Figure 23 illustrates self-reported drinking and driving in California by gender and race, based on data aggregated over the six years of data collection.

- Males are 3.6 times more likely than females to report drinking and driving (6.0 percent vs. 1.7 percent, respectively), which is similar to the gender difference in chronic drinking. While this difference is apparent within each of the four race/ethnicity groups, it is only statistically significant for whites, Hispanics, and between men and women as a whole.

- More than one out of ten Hispanic males (10.4 percent) report driving after having too much to drink in the last month. This group is significantly more likely than any other race/gender group to report drinking and driving. Although Hispanic women were more likely to report drinking and driving than other women, the difference was not statistically significant.

Figure 24: PREVALENCE OF DRINKING AND DRIVING IN CALIFORNIA BY GENDER, AGE AND EDUCATION: 1984 - 1989 *



From the California Behavioral Risk Factor Survey, based on self-reported telephone interview data of adults aged 18 and older, weighted to the age-, race-, and sex-specific distribution of the 1988 California population. California Department of Health Services, July 1990.

Figure 24 depicts drinking and driving in California adults over the period 1984-1989 by gender, ten-year age category and educational level.

- Just as was seen for chronic drinking, educational level is not a strong predictor of drinking and driving. While both men and women with education beyond high school are slightly more likely than their counterparts with less education to report drinking and driving, the difference is not statistically significant (1.3 percent vs. 2.0 percent for women, and 5.9 percent vs. 6.1 percent for men).

- The risk for drinking and driving decreases markedly with age, dropping from 7.5 percent for 18-24 year olds to virtually zero percent for adults 65 and older. Very few adults over the age of 55 report drinking and driving. Sharp declines in drinking and driving with age are reported by both males and females and by those from both education groups.

- Over eleven percent of males aged 18-24 years old, or nearly one out of nine, reported drinking and driving within the last month.

4. Summary

- Approximately one out of 26 adults in California report driving after having had too much to drink in the last month. There has been no change in the prevalence of self-reported drinking and driving over the six years of data collection.

- As with chronic drinking, males are much more likely than females to drink and drive, especially Hispanic males.

- Drinking and driving is not associated with educational level, but shows a strong inverse association with age.

V. CITATIONS

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9 Najjar MF, Rowland M. Anthropometric reference data and prevalence of overweight--United States, 1976-80. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, 1987. DHHS publication no. (PHS)87-1688. (Vital and health statistics; series 11, no. 238).

VI. APPENDIXES

APPENDIX A: SURVEY QUESTIONS FOR SEVEN KEY RISK FACTORS

Cigarette Smoking

I'd like to ask you a few questions about cigarette smoking. Have you smoked at least 100 cigarettes in your entire life? **Yes**

Do you smoke cigarettes now? **Yes**

On the average, about how many cigarettes a day do you now smoke? **Any answer except "Don't smoke regularly"**

Seat Belt Use

How often do you use seat belts when you drive or ride in a car? Would you say always, nearly always, sometimes, seldom, or never?

Use: **Always or almost always**
Infrequent or nonuse: **Sometimes, seldom or never**

Lack of Exercise

The next few questions are about exercise, recreation, or physical activities other than your regular job duties. During the past month, did you participate in any physical activities or exercise such as running, calisthenics, golf, gardening or walking for exercise? **No**

Overweight

About how much do you weigh without shoes?
About how tall are you without shoes?

Body mass index is calculated as:

$$\text{weight in kg}/[(\text{height in m})^2]$$

Overweight was defined as a BMI equal to or greater than the 85th percentile of the reference population in the second National Health and Nutrition Examination Survey. Male respondents were considered overweight if they had a BMI of 27.8 or higher, while females were considered overweight if they had a BMI of 27.3 or higher.

Hypertension

These next few questions are about hypertension or high blood pressure. Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure? **Yes**

Chronic Drinking

1984 - 1988

These next few questions are about the use of beer, wine, or liquor -- all kinds of alcoholic beverages that people drink at meals, special occasions, or when just relaxing.

Have you had any beer, wine, or liquor during the past month, that is since [GIVE DATE]? **Yes**

During the past month, how many days per week or per month did you drink any beer?

On the days when you drank beer, about how many beers did you drink on the average?

During the past month, how many days per week or per month did you drink any wine?

On the days when you drank wine, about how many glasses of wine did you drink on the average?

During the past month, how many days per week or per month did you have any liquor to drink, such as vodka, gin, rum or whiskey?

On the days when you drank any liquor, about how many drinks did you have on the average?

Average of sixty or more alcoholic beverages per month

1989

These next few questions are about the use of beer, wine, wine coolers, or liquor, such as vodka, gin, rum, or whiskey -- all kinds of alcoholic beverages that people drink at meals, special occasions, or when just relaxing.

Have you had any beer, wine, wine coolers, cocktails, or liquor during the past month, that is since [GIVE DATE]? **Yes**

During the past month, how many days per week or per month did you drink any alcoholic beverages, on the average?

Chronic Drinking, continued

A drink is one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor. On the days when you drink, about how many drinks do you drink on the average?

Average of sixty or more alcoholic beverages per month

Drinking and Driving

During the past month, how many times have you driven when you've had perhaps too much to drink? **One or more**

APPENDIX B

TABLE 1: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO CURRENTLY SMOKE CIGARETTES, BY YEAR, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		CURRENT SMOKER		
		NO	YES	UNK/REF
SAMPLE YEAR				
1984	PERCENT	74.39	25.19	0.43
N = 1,086	UPPER	77.37	28.13	0.93
	LOWER	71.40	22.24	0.00
1985	PERCENT	74.34	25.38	0.28
N = 1,369	UPPER	76.82	27.85	0.66
	LOWER	71.86	22.90	0.00
1986	PERCENT	75.51	24.39	0.10
N = 1,569	UPPER	77.90	26.78	0.24
	LOWER	73.12	22.00	0.00
1987	PERCENT	78.08	21.34	0.58
N = 1,784	UPPER	80.38	23.61	1.06
	LOWER	75.77	19.08	0.10
1988	PERCENT	77.20	22.40	0.40
N = 2,444	UPPER	79.09	24.28	0.73
	LOWER	75.30	20.52	0.08
1989	PERCENT	77.78	21.84	0.38
N = 2,398	UPPER	79.62	23.66	0.63
	LOWER	75.95	20.01	0.13

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 2: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO CURRENTLY SMOKE CIGARETTES, BY YEAR AND GENDER, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
SAMPLE YEAR				
1984	PERCENT	27.98	22.53	25.19
	SAMPLE SIZE	450	636	1086
	UPPER	32.77	26.00	28.13
	LOWER	23.18	19.06	22.24
1985	PERCENT	26.36	24.44	25.38
	SAMPLE SIZE	595	774	1369
	UPPER	30.29	27.72	27.85
	LOWER	22.44	21.16	22.90
1986	PERCENT	25.50	23.34	24.39
	SAMPLE SIZE	658	911	1569
	UPPER	28.94	26.46	26.78
	LOWER	22.05	20.22	22.00
1987	PERCENT	22.89	19.87	21.34
	SAMPLE SIZE	756	1028	1784
	UPPER	26.36	22.74	23.61
	LOWER	19.41	17.01	19.08
1988	PERCENT	24.87	20.05	22.40
	SAMPLE SIZE	1068	1376	2444
	UPPER	27.82	22.45	24.28
	LOWER	21.92	17.66	20.52
1989	PERCENT	22.27	21.43	21.84
	SAMPLE SIZE	1094	1304	2398
	UPPER	24.94	23.88	23.66
	LOWER	19.60	18.97	20.01

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 3: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO CURRENTLY SMOKE CIGARETTES, BY SEX AND RACE/ETHNICITY, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
RACE / ETHNICITY				
WHITE	PERCENT	24.51	23.62	24.05
	SAMPLE SIZE	3340	4314	7654
	UPPER	26.21	25.05	25.17
	LOWER	22.81	22.19	22.93
BLACK	PERCENT	25.41	25.67	25.55
	SAMPLE SIZE	259	431	690
	UPPER	31.49	30.68	29.49
	LOWER	19.33	20.67	21.60
HISPANIC	PERCENT	25.95	17.62	21.82
	SAMPLE SIZE	743	937	1680
	UPPER	29.75	20.69	24.26
	LOWER	22.15	14.56	19.39
OTHER	PERCENT	25.19	15.55	20.16
	SAMPLE SIZE	279	347	626
	UPPER	31.28	20.22	23.99
	LOWER	19.11	10.87	16.33
TOTAL	PERCENT	24.91	21.99	23.41
	SAMPLE SIZE	4621	6029	10650
	UPPER	26.38	23.21	24.37
	LOWER	23.43	20.77	22.45

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 4A: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO CURRENTLY SMOKE CIGARETTES, BY AGE, GENDER AND EDUCATION, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

MALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	28.46	9.00	0.00	20.02
	SAMPLE SIZE	330	298	0	628
	UPPER	34.07	12.35	0.00	23.58
	LOWER	22.84	5.65	0.00	16.46
25-34	PERCENT	36.94	20.46	0.00	26.92
	SAMPLE SIZE	478	823	1	1302
	UPPER	42.13	23.70	0.00	29.76
	LOWER	31.74	17.23	0.00	24.08
35-44	PERCENT	40.69	25.62	0.00	29.26
	SAMPLE SIZE	226	833	0	1059
	UPPER	48.03	29.13	0.00	32.45
	LOWER	33.34	22.12	0.00	26.06
45-54	PERCENT	43.92	25.31	100.00	32.70
	SAMPLE SIZE	210	373	1	584
	UPPER	52.01	30.46	100.00	37.38
	LOWER	35.82	20.16	100.00	28.01
55-64	PERCENT	26.12	20.69	100.00	23.16
	SAMPLE SIZE	195	292	1	488
	UPPER	32.75	26.45	100.00	27.48
	LOWER	19.50	14.93	100.00	18.83
65 +	PERCENT	17.87	9.71	0.00	13.89
	SAMPLE SIZE	282	274	4	560
	UPPER	23.44	13.66	0.00	17.36
	LOWER	12.31	5.76	0.00	10.42
TOTAL	PERCENT	31.95	19.99	32.53	24.91
	SAMPLE SIZE	1721	2893	7	4621
	UPPER	34.56	21.72	70.56	26.38
	LOWER	29.33	18.27	0.00	23.43

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 4B: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO CURRENTLY SMOKE CIGARETTES, BY AGE, GENDER AND EDUCATION, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

FEMALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	28.14	11.65	0.00	20.40
	SAMPLE SIZE	365	360	0	725
	UPPER	33.58	15.42	0.00	23.91
	LOWER	22.69	7.89	0.00	16.88
25-34	PERCENT	29.67	16.72	0.00	21.96
	SAMPLE SIZE	597	929	0	1526
	UPPER	33.78	19.39	0.00	24.29
	LOWER	25.57	14.06	0.00	19.63
35-44	PERCENT	30.09	19.14	0.00	23.06
	SAMPLE SIZE	432	882	2	1316
	UPPER	35.03	22.13	0.00	25.73
	LOWER	25.15	16.15	0.00	20.40
45-54	PERCENT	34.75	21.70	100.00	28.05
	SAMPLE SIZE	319	419	2	740
	UPPER	40.78	26.27	100.00	31.88
	LOWER	28.71	17.12	100.00	24.23
55-64	PERCENT	25.68	21.63	0.00	23.81
	SAMPLE SIZE	348	327	2	677
	UPPER	31.14	26.52	0.00	27.51
	LOWER	20.22	16.73	0.00	20.11
65 +	PERCENT	17.58	14.74	0.00	16.33
	SAMPLE SIZE	588	452	5	1045
	UPPER	21.02	18.14	0.00	18.79
	LOWER	14.14	11.34	0.00	13.87
TOTAL	PERCENT	27.00	17.49	12.80	21.99
	SAMPLE SIZE	2649	3369	11	6029
	UPPER	28.98	18.93	30.85	23.21
	LOWER	25.03	16.05	0.00	20.77

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 4C: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO CURRENTLY SMOKE CIGARETTES, BY AGE, GENDER AND EDUCATION, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

TOTAL

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	28.31	10.32	0.00	20.20
	SAMPLE SIZE	695	658	0	1353
	UPPER	32.17	12.84	0.00	22.68
	LOWER	24.45	7.80	0.00	17.71
25-34	PERCENT	33.28	18.62	0.00	24.45
	SAMPLE SIZE	1075	1752	1	2828
	UPPER	36.56	20.70	0.00	26.26
	LOWER	29.99	16.54	0.00	22.64
35-44	PERCENT	34.31	22.69	0.00	26.17
	SAMPLE SIZE	658	1715	2	2375
	UPPER	38.53	25.06	0.00	28.27
	LOWER	30.09	20.32	0.00	24.07
45-54	PERCENT	38.84	23.62	100.00	30.35
	SAMPLE SIZE	529	792	3	1324
	UPPER	43.91	27.07	100.00	33.40
	LOWER	33.76	20.17	100.00	27.30
55-64	PERCENT	25.85	21.11	41.26	23.50
	SAMPLE SIZE	543	619	3	1165
	UPPER	30.01	24.98	99.61	26.33
	LOWER	21.70	17.24	0.00	20.67
65 +	PERCENT	17.69	12.50	0.00	15.32
	SAMPLE SIZE	870	726	9	1605
	UPPER	20.70	15.08	0.00	17.35
	LOWER	14.69	9.92	0.00	13.30
TOTAL	PERCENT	29.23	18.78	21.37	23.41
	SAMPLE SIZE	4370	6262	18	10650
	UPPER	30.84	19.91	41.81	24.37
	LOWER	27.62	17.66	0.93	22.45

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 5: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO REPORT USING SEAT BELTS ALWAYS OR ALMOST ALWAYS, BY YEAR, 1984 - 1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		USE SEATBELTS ALWAYS OR ALMOST ALWAYS		
		YES	NO	UNK/REF
SAMPLE YEAR				
1984	PERCENT	48.96	51.04	0.00
N = 1,086	UPPER	52.52	54.60	0.00
	LOWER	45.40	47.48	0.00
1985	PERCENT	52.53	47.22	0.25
N = 1,369	UPPER	55.68	50.36	0.49
	LOWER	49.39	44.08	0.00
1986	PERCENT	79.73	20.09	0.18
N = 1,569	UPPER	82.14	22.49	0.39
	LOWER	77.32	17.68	0.00
1987	PERCENT	80.74	19.26	0.00
N = 1,784	UPPER	83.03	21.55	0.00
	LOWER	78.45	16.97	0.00
1988	PERCENT	81.57	18.41	0.02
N = 2,444	UPPER	83.38	20.22	0.07
	LOWER	79.76	16.59	0.00
1989	PERCENT	83.37	16.60	0.03
N = 2,398	UPPER	85.07	18.30	0.10
	LOWER	81.66	14.90	0.00

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 6: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO REPORT USING SEAT BELTS ALWAYS OR ALMOST ALWAYS, BY YEAR AND SEX, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
SAMPLE YEAR				
1984	PERCENT	46.82	50.99	48.96
	SAMPLE SIZE	450	636	1086
	UPPER	52.26	55.40	52.52
	LOWER	41.38	46.59	45.40
1985	PERCENT	50.65	54.32	52.53
	SAMPLE SIZE	595	774	1369
	UPPER	55.41	58.18	55.68
	LOWER	45.89	50.46	49.39
1986	PERCENT	74.95	84.28	79.73
	SAMPLE SIZE	658	911	1569
	UPPER	78.73	87.09	82.14
	LOWER	71.16	81.48	77.32
1987	PERCENT	76.42	84.85	80.74
	SAMPLE SIZE	756	1028	1784
	UPPER	79.98	87.65	83.03
	LOWER	72.85	82.05	78.45
1988	PERCENT	78.87	84.14	81.57
	SAMPLE SIZE	1068	1376	2444
	UPPER	81.65	86.42	83.38
	LOWER	76.08	81.85	79.76
1989	PERCENT	79.42	87.11	83.37
	SAMPLE SIZE	1094	1304	2398
	UPPER	82.08	89.21	85.07
	LOWER	76.77	85.01	81.66

WEIGHTED TO REFLECT THE AGE- RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 7: PERCENT OF CALIFORNIAN ADULTS AGED 18 AND OLDER WHO REPORT USING SEAT BELTS SOMETIMES, SELDOM OR NEVER BY GENDER AND RACE/ETHNICITY, 1986 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
RACE / ETHNICITY				
WHITE	PERCENT	20.62	13.80	17.10
	SAMPLE SIZE	2563	3289	5852
	UPPER	22.39	15.20	18.23
	LOWER	18.86	12.39	15.98
BLACK	PERCENT	32.63	20.83	26.43
	SAMPLE SIZE	193	328	521
	UPPER	41.33	26.36	31.56
	LOWER	23.93	15.30	21.29
HISPANIC	PERCENT	27.36	18.22	22.83
	SAMPLE SIZE	601	724	1325
	UPPER	31.44	21.60	25.53
	LOWER	23.29	14.85	20.14
OTHER	PERCENT	18.51	7.93	12.99
	SAMPLE SIZE	219	278	497
	UPPER	24.84	11.29	16.58
	LOWER	12.19	4.58	9.40
TOTAL	PERCENT	22.59	14.61	18.50
	SAMPLE SIZE	3576	4619	8195
	UPPER	24.20	15.85	19.53
	LOWER	20.97	13.37	17.46

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 8A: PERCENT OF CALIFORNIAN ADULTS AGED 18 AND OLDER, WHO REPORT USING SEATBELTS SOMETIMES, SELDOM OR NEVER BY AGE, GENDER AND EDUCATION, 1986-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

MALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	39.92	27.92	0.00	34.35
	SAMPLE SIZE	244	237	0	481
	UPPER	47.38	34.36	0.00	39.40
	LOWER	32.46	21.48	0.00	29.30
25-34	PERCENT	30.26	18.68	0.00	23.27
	SAMPLE SIZE	369	623	1	993
	UPPER	35.86	22.13	0.00	26.34
	LOWER	24.65	15.23	0.00	20.19
35-44	PERCENT	29.61	17.76	0.00	20.58
	SAMPLE SIZE	179	657	0	836
	UPPER	37.22	21.27	0.00	23.81
	LOWER	22.01	14.25	0.00	17.34
45-54	PERCENT	21.02	19.94	100.00	20.57
	SAMPLE SIZE	167	294	1	462
	UPPER	27.87	25.23	100.00	24.82
	LOWER	14.18	14.64	100.00	16.32
55-64	PERCENT	19.52	18.16	0.00	18.65
	SAMPLE SIZE	154	227	1	382
	UPPER	26.09	23.76	0.00	22.86
	LOWER	12.94	12.56	0.00	14.44
65 +	PERCENT	15.08	13.61	100.00	14.42
	SAMPLE SIZE	213	208	1	422
	UPPER	20.11	18.57	100.00	17.92
	LOWER	10.04	8.65	100.00	10.93
TOTAL	PERCENT	27.40	19.26	24.33	22.59
	SAMPLE SIZE	1326	2246	4	3576
	UPPER	30.29	21.14	64.11	24.20
	LOWER	24.52	17.39	0.00	20.97

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 88: PERCENT OF CALIFORNIAN ADULTS AGED 18 AND OLDER, WHO REPORT USING SEATBELTS SOMETIMES, SELDOM OR NEVER BY AGE, GENDER AND EDUCATION, 1986-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

FEMALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	29.81	8.71	0.00	19.52
	SAMPLE SIZE	262	272	0	534
	UPPER	36.19	12.61	0.00	23.42
	LOWER	23.44	4.81	0.00	15.62
25-34	PERCENT	20.05	10.88	0.00	14.69
	SAMPLE SIZE	489	732	0	1221
	UPPER	23.89	13.43	0.00	16.91
	LOWER	16.22	8.32	0.00	12.47
35-44	PERCENT	20.89	10.87	0.00	14.36
	SAMPLE SIZE	313	688	0	1001
	UPPER	27.00	13.68	0.00	17.21
	LOWER	14.79	8.06	0.00	11.51
45-54	PERCENT	20.50	14.80	100.00	17.75
	SAMPLE SIZE	233	328	2	563
	UPPER	26.87	19.49	100.00	21.67
	LOWER	14.14	10.11	100.00	13.82
55-64	PERCENT	13.43	10.59	100.00	12.54
	SAMPLE SIZE	265	248	1	514
	UPPER	18.04	14.90	100.00	15.80
	LOWER	8.82	6.28	100.00	9.27
65 +	PERCENT	11.39	7.18	24.14	9.69
	SAMPLE SIZE	436	346	4	786
	UPPER	14.89	10.03	67.71	12.04
	LOWER	7.88	4.33	0.00	7.34
TOTAL	PERCENT	18.97	10.56	65.12	14.61
	SAMPLE SIZE	1998	2614	7	4619
	UPPER	21.05	11.94	100.00	15.85
	LOWER	16.89	9.18	26.43	13.37

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 8C: PERCENT OF CALIFORNIAN ADULTS AGED 18 AND OLDER, WHO REPORT USING SEATBELTS SOMETIMES, SELDOM OR NEVER BY AGE, GENDER AND EDUCATION, 1986-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

TOTAL

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	35.19	18.47	0.00	27.24
	SAMPLE SIZE	506	509	0	1015
	UPPER	40.17	22.39	0.00	30.51
	LOWER	30.21	14.56	0.00	23.97
25-34	PERCENT	25.09	14.84	0.00	19.00
	SAMPLE SIZE	858	1355	1	2214
	UPPER	28.52	17.02	0.00	20.93
	LOWER	21.65	12.65	0.00	17.06
35-44	PERCENT	24.44	14.59	0.00	17.48
	SAMPLE SIZE	492	1345	0	1837
	UPPER	29.19	16.89	0.00	19.62
	LOWER	19.68	12.30	0.00	15.33
45-54	PERCENT	20.74	17.50	100.00	19.14
	SAMPLE SIZE	400	622	3	1025
	UPPER	25.50	21.07	100.00	22.06
	LOWER	15.97	13.93	100.00	16.23
55-64	PERCENT	15.86	14.75	44.05	15.43
	SAMPLE SIZE	419	475	2	896
	UPPER	19.68	18.42	100.00	18.08
	LOWER	12.04	11.09	0.00	12.79
65 +	PERCENT	12.81	10.04	30.38	11.64
	SAMPLE SIZE	649	554	5	1208
	UPPER	15.69	12.81	73.41	13.63
	LOWER	9.93	7.27	0.00	9.65
TOTAL	PERCENT	22.77	15.05	45.15	18.50
	SAMPLE SIZE	3324	4860	11	8195
	UPPER	24.54	16.25	78.88	19.53
	LOWER	21.01	13.84	11.42	17.46

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 9: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO PARTICIPATE IN PHYSICAL EXERCISE OUTSIDE OF WORK DUTIES 1984-1989, FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		EXERCISE OUTSIDE OF WORK DUTIES		
		YES	NO	UNK/REF
SAMPLE YEAR				
1984	PERCENT	79.00	20.56	0.44
N = 1,086	UPPER	81.92	23.42	1.29
	LOWER	76.09	17.70	0.00
1985	PERCENT	74.98	24.91	0.11
N = 1,369	UPPER	77.61	27.54	0.33
	LOWER	72.36	22.28	0.00
1986	PERCENT	75.88	24.05	0.07
N = 1,569	UPPER	78.29	26.45	0.20
	LOWER	73.47	21.65	0.00
1987	PERCENT	73.09	26.91	0.00
N = 1,784	UPPER	75.57	29.40	0.00
	LOWER	70.60	24.43	0.00
1988	PERCENT	77.54	22.46	0.00
N = 2,444	UPPER	79.55	24.47	0.00
	LOWER	75.53	20.45	0.00
1989	PERCENT	75.83	24.17	0.00
N = 2,398	UPPER	77.87	26.20	0.00
	LOWER	73.80	22.13	0.00

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 10: PREVALENCE OF NOT EXERCISING OUTSIDE OF WORK DUTIES
AMONG CALIFORNIA ADULTS AGED 18 AND OLDER
BY SEX AND RACE/ETHNICITY, AGGREGATED DATA 1984-1989

		SEX		
		MALE	FEMALE	TOTAL
RACE / ETHNICITY				
WHITE	PERCENT	18.71	21.96	20.39
	SAMPLE SIZE	3340	4314	7654
	UPPER	20.27	23.39	21.45
	LOWER	17.14	20.54	19.32
BLACK	PERCENT	19.56	30.65	25.39
	SAMPLE SIZE	259	431	690
	UPPER	25.50	35.52	29.22
	LOWER	13.61	25.77	21.55
HISPANIC	PERCENT	30.20	33.68	31.92
	SAMPLE SIZE	743	937	1680
	UPPER	34.19	37.33	34.67
	LOWER	26.21	30.02	29.17
OTHER	PERCENT	29.07	35.17	32.25
	SAMPLE SIZE	279	347	626
	UPPER	35.84	41.27	36.80
	LOWER	22.30	29.08	27.71
TOTAL	PERCENT	21.85	25.84	23.90
	SAMPLE SIZE	4621	6029	10650
	UPPER	23.32	27.17	24.90
	LOWER	20.39	24.51	22.89

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 11A: PREVALENCE OF NOT EXERCISING OUTSIDE OF WORK DUTIES
AMONG CALIFORNIA ADULTS AGED 18 AND OLDER
BY AGE, GENDER AND EDUCATION, 1984-1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

MALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	24.40	8.26	0.00	17.40
	SAMPLE SIZE	330	298	0	628
	UPPER	30.54	11.43	0.00	21.28
	LOWER	18.26	5.09	0.00	13.53
25-34	PERCENT	24.06	12.39	0.00	16.96
	SAMPLE SIZE	478	823	1	1302
	UPPER	28.66	15.07	0.00	19.40
	LOWER	19.46	9.71	0.00	14.52
35-44	PERCENT	39.43	14.40	0.00	20.43
	SAMPLE SIZE	226	833	0	1059
	UPPER	46.97	17.16	0.00	23.38
	LOWER	31.89	11.63	0.00	17.48
45-54	PERCENT	51.47	15.73	0.00	29.59
	SAMPLE SIZE	210	373	1	584
	UPPER	59.53	20.14	0.00	34.08
	LOWER	43.40	11.31	0.00	25.09
55-64	PERCENT	38.03	21.17	100.00	28.31
	SAMPLE SIZE	195	292	1	488
	UPPER	45.94	26.82	100.00	33.09
	LOWER	30.12	15.53	100.00	23.53
65 +	PERCENT	29.04	21.82	47.56	25.75
	SAMPLE SIZE	282	274	4	560
	UPPER	35.23	27.52	100.00	30.04
	LOWER	22.86	16.13	0.00	21.47
TOTAL	PERCENT	31.86	14.85	39.63	21.85
	SAMPLE SIZE	1721	2893	7	4621
	UPPER	34.54	16.37	80.77	23.32
	LOWER	29.18	13.32	0.00	20.39

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 11B: PREVALENCE OF NOT EXERCISING OUTSIDE OF WORK DUTIES
AMONG CALIFORNIA ADULTS AGED 18 AND OLDER
BY AGE, GENDER AND EDUCATION, 1984-1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

FEMALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	27.55	12.67	0.00	20.56
	SAMPLE SIZE	365	360	0	725
	UPPER	32.87	17.20	0.00	24.12
	LOWER	22.23	8.14	0.00	17.01
25-34	PERCENT	28.77	16.61	0.00	21.53
	SAMPLE SIZE	597	929	0	1526
	UPPER	32.84	19.43	0.00	23.89
	LOWER	24.71	13.80	0.00	19.17
35-44	PERCENT	31.86	20.19	0.00	24.37
	SAMPLE SIZE	432	882	2	1316
	UPPER	37.08	23.33	0.00	27.14
	LOWER	26.63	17.05	0.00	21.60
45-54	PERCENT	35.59	21.25	40.46	28.07
	SAMPLE SIZE	319	419	2	740
	UPPER	41.83	26.28	100.00	32.07
	LOWER	29.36	16.22	0.00	24.07
55-64	PERCENT	37.59	20.92	0.00	30.18
	SAMPLE SIZE	348	327	2	677
	UPPER	43.78	25.80	0.00	34.35
	LOWER	31.39	16.04	0.00	26.01
65 +	PERCENT	38.43	26.11	7.77	33.21
	SAMPLE SIZE	588	452	5	1045
	UPPER	43.10	30.84	23.81	36.61
	LOWER	33.76	21.37	0.00	29.81
TOTAL	PERCENT	33.22	19.23	7.69	25.84
	SAMPLE SIZE	2649	3369	11	6029
	UPPER	35.33	20.82	19.43	27.17
	LOWER	31.11	17.64	0.00	24.51

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 11C: PREVALENCE OF NOT EXERCISING OUTSIDE OF WORK DUTIES
AMONG CALIFORNIA ADULTS AGED 18 AND OLDER
BY AGE, GENDER AND EDUCATION, 1984-1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

TOTAL

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	25.86	10.46	0.00	18.92
	SAMPLE SIZE	695	658	0	1353
	UPPER	30.03	13.26	0.00	21.60
	LOWER	21.69	7.67	0.00	16.23
25-34	PERCENT	26.43	14.48	0.00	19.24
	SAMPLE SIZE	1075	1752	1	2828
	UPPER	29.52	16.43	0.00	20.94
	LOWER	23.35	12.52	0.00	17.54
35-44	PERCENT	34.87	17.02	0.00	22.40
	SAMPLE SIZE	658	1715	2	2375
	UPPER	39.32	19.10	0.00	24.41
	LOWER	30.43	14.93	0.00	20.38
45-54	PERCENT	42.67	18.31	22.23	28.82
	SAMPLE SIZE	529	792	3	1324
	UPPER	47.74	21.66	63.90	31.85
	LOWER	37.61	14.97	0.00	25.79
55-64	PERCENT	37.76	21.06	41.26	29.29
	SAMPLE SIZE	543	619	3	1165
	UPPER	42.58	24.98	99.61	32.48
	LOWER	32.95	17.14	0.00	26.11
65 +	PERCENT	34.83	24.20	28.03	30.14
	SAMPLE SIZE	870	726	9	1605
	UPPER	38.59	27.84	66.44	32.83
	LOWER	31.07	20.56	0.00	27.46
TOTAL	PERCENT	32.61	16.97	21.56	23.90
	SAMPLE SIZE	4370	6262	18	10650
	UPPER	34.30	18.08	43.53	24.90
	LOWER	30.92	15.85	0.00	22.89

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 12: PREVALENCE OF OVERWEIGHT BASED ON BODY MASS INDEX AMONG CALIFORNIA ADULTS AGED 18 AND OLDER, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		OVERWEIGHT BASED ON BODY MASS INDEX		
		NO	YES	UNK/REF
SAMPLE YEAR				
1984	PERCENT	79.72	16.56	3.71
N = 1,086	UPPER	82.55	19.19	5.03
	LOWER	76.89	13.94	2.39
1985	PERCENT	81.66	15.14	3.20
N = 1,369	UPPER	83.95	17.20	4.29
	LOWER	79.38	13.07	2.11
1986	PERCENT	79.17	17.51	3.32
N = 1,569	UPPER	81.42	19.62	4.32
	LOWER	76.92	15.41	2.31
1987	PERCENT	78.33	18.05	3.62
N = 1,784	UPPER	80.71	20.15	4.96
	LOWER	75.94	15.96	2.28
1988	PERCENT	76.50	20.92	2.57
N = 2,444	UPPER	78.56	22.86	3.43
	LOWER	74.44	18.99	1.71
1989	PERCENT	77.98	17.24	4.78
N = 2,398	UPPER	79.86	18.96	5.87
	LOWER	76.11	15.52	3.69

OVERWEIGHT DEFINED AS BMI OF 27.8 OR HIGHER FOR MEN AND 27.3 OR HIGHER FOR WOMEN

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 13: PREVALENCE OF OVERWEIGHT BASED ON BODY MASS INDEX
AMONG CALIFORNIA ADULTS AGED 18 AND OLDER, BY SEX AND RACE/ETHNICITY, 1984-1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
RACE / ETHNICITY				
WHITE	PERCENT	18.66	14.89	16.72
	SAMPLE SIZE	3340	4314	7654
	UPPER	20.18	16.09	17.67
	LOWER	17.14	13.69	15.76
BLACK	PERCENT	15.53	25.22	20.62
	SAMPLE SIZE	259	431	690
	UPPER	20.33	30.17	24.23
	LOWER	10.72	20.27	17.01
HISPANIC	PERCENT	22.35	20.26	21.32
	SAMPLE SIZE	743	937	1680
	UPPER	25.88	23.26	23.65
	LOWER	18.81	17.27	18.98
OTHER	PERCENT	11.55	10.77	11.14
	SAMPLE SIZE	279	347	626
	UPPER	16.60	14.97	14.40
	LOWER	6.49	6.56	7.88
TOTAL	PERCENT	18.59	16.26	17.39
	SAMPLE SIZE	4621	6029	10650
	UPPER	19.91	17.36	18.25
	LOWER	17.26	15.16	16.53

OVERWEIGHT DEFINED AS BMI OF 27.8 OR HIGHER FOR MALES
AND 27.3 OR HIGHER FOR FEMALES

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 14A: PREVALENCE OF OVERWEIGHT BASED ON BODY MASS INDEX AMONG CALIFORNIA ADULTS AGED 18 AND OLDER, BY AGE, GENDER AND EDUCATION, 1984-1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

MALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	10.85	6.20	0.00	8.83
	SAMPLE SIZE	330	298	0	628
	UPPER	15.13	9.11	0.00	11.57
	LOWER	6.56	3.29	0.00	6.09
25-34	PERCENT	19.34	11.52	0.00	14.58
	SAMPLE SIZE	478	823	1	1302
	UPPER	23.87	13.94	0.00	16.92
	LOWER	14.81	9.10	0.00	12.24
35-44	PERCENT	33.12	19.57	0.00	22.84
	SAMPLE SIZE	226	833	0	1059
	UPPER	40.28	22.78	0.00	25.85
	LOWER	25.97	16.36	0.00	19.82
45-54	PERCENT	34.84	24.20	0.00	28.29
	SAMPLE SIZE	210	373	1	584
	UPPER	42.27	29.24	0.00	32.54
	LOWER	27.41	19.16	0.00	24.03
55-64	PERCENT	30.31	22.24	0.00	25.47
	SAMPLE SIZE	195	292	1	488
	UPPER	37.56	27.63	0.00	29.79
	LOWER	23.07	16.86	0.00	21.16
65 +	PERCENT	17.09	15.43	0.00	16.19
	SAMPLE SIZE	282	274	4	560
	UPPER	22.07	19.97	0.00	19.54
	LOWER	12.11	10.88	0.00	12.83
TOTAL	PERCENT	21.89	16.36	0.00	18.59
	SAMPLE SIZE	1721	2893	7	4621
	UPPER	24.21	17.92	0.00	19.91
	LOWER	19.56	14.80	0.00	17.26

OVERWEIGHT DEFINED AS BMI OF 27.8 OR HIGHER FOR MALES AND 27.3 OR HIGHER FOR FEMALES

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 14B: PREVALENCE OF OVERWEIGHT BASED ON BODY MASS INDEX AMONG CALIFORNIA ADULTS AGED 18 AND OLDER, BY AGE, GENDER AND EDUCATION, 1984-1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

FEMALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	9.62	5.51	0.00	7.69
	SAMPLE SIZE	365	360	0	725
	UPPER	12.92	8.30	0.00	9.91
	LOWER	6.32	2.72	0.00	5.48
25-34	PERCENT	12.85	8.86	0.00	10.47
	SAMPLE SIZE	597	929	0	1526
	UPPER	15.89	10.88	0.00	12.21
	LOWER	9.81	6.84	0.00	8.74
35-44	PERCENT	21.61	14.12	0.00	16.80
	SAMPLE SIZE	432	882	2	1316
	UPPER	26.11	16.91	0.00	19.19
	LOWER	17.11	11.33	0.00	14.41
45-54	PERCENT	31.96	14.41	0.00	22.67
	SAMPLE SIZE	319	419	2	740
	UPPER	38.17	18.25	0.00	26.39
	LOWER	25.76	10.57	0.00	18.94
55-64	PERCENT	29.00	18.21	43.53	24.36
	SAMPLE SIZE	348	327	2	677
	UPPER	34.44	22.73	100.00	28.06
	LOWER	23.56	13.68	0.00	20.65
65 +	PERCENT	24.13	15.16	15.54	20.40
	SAMPLE SIZE	588	452	5	1045
	UPPER	28.21	18.84	45.28	23.23
	LOWER	20.06	11.48	0.00	17.57
TOTAL	PERCENT	20.79	12.16	14.00	16.26
	SAMPLE SIZE	2649	3369	11	6029
	UPPER	22.59	13.42	33.80	17.36
	LOWER	18.99	10.90	0.00	15.16

OVERWEIGHT DEFINED AS BMI OF 27.8 OR HIGHER FOR MALES AND 27.3 OR HIGHER FOR FEMALES

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 14C: PREVALENCE OF OVERWEIGHT BASED ON BODY MASS INDEX AMONG CALIFORNIA ADULTS AGED 18 AND OLDER, BY AGE, GENDER AND EDUCATION, 1984-1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

TOTAL

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	10.28	5.86	0.00	8.28
	SAMPLE SIZE	695	658	0	1353
	UPPER	13.04	7.87	0.00	10.07
	LOWER	7.52	3.85	0.00	6.50
25-34	PERCENT	16.07	10.21	0.00	12.54
	SAMPLE SIZE	1075	1752	1	2828
	UPPER	18.95	11.77	0.00	14.04
	LOWER	13.19	8.64	0.00	11.04
35-44	PERCENT	26.19	17.10	0.00	19.82
	SAMPLE SIZE	658	1715	2	2375
	UPPER	30.14	19.31	0.00	21.78
	LOWER	22.24	14.90	0.00	17.86
45-54	PERCENT	33.24	19.61	0.00	25.44
	SAMPLE SIZE	529	792	3	1324
	UPPER	38.03	22.88	0.00	28.27
	LOWER	28.46	16.35	0.00	22.62
55-64	PERCENT	29.52	20.42	25.57	24.89
	SAMPLE SIZE	543	619	3	1165
	UPPER	33.86	24.04	71.35	27.69
	LOWER	25.18	16.80	0.00	22.08
65 +	PERCENT	21.43	15.28	7.63	18.66
	SAMPLE SIZE	870	726	9	1605
	UPPER	24.58	18.12	22.59	20.82
	LOWER	18.28	12.44	0.00	16.51
TOTAL	PERCENT	21.29	14.33	7.92	17.39
	SAMPLE SIZE	4370	6262	18	10650
	UPPER	22.73	15.34	19.22	18.25
	LOWER	19.84	13.32	0.00	16.53

OVERWEIGHT DEFINED AS BMI OF 27.8 OR HIGHER FOR MALES AND 27.3 OR HIGHER FOR FEMALES

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 15: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO HAVE EVER BEEN TOLD THEY HAVE HIGH BLOOD PRESSURE, BY YEAR, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		EVER TOLD BLOOD PRESSURE HIGH		
		NO	YES	UNK/REF
SAMPLE YEAR				
1984	PERCENT	75.83	23.73	0.44
N = 1,086	UPPER	78.82	26.63	1.29
	LOWER	72.84	20.79	0.00
1985	PERCENT	77.44	22.24	0.32
N = 1,369	UPPER	80.03	24.82	0.65
	LOWER	74.85	19.67	0.00
1986	PERCENT	78.66	20.86	0.47
N = 1,569	UPPER	80.84	23.01	0.87
	LOWER	76.49	18.71	0.08
1987	PERCENT	79.30	20.67	0.03
N = 1,784	UPPER	81.39	22.76	0.10
	LOWER	77.21	18.58	0.00
1988	PERCENT	79.22	20.65	0.13
N = 2,444	UPPER	81.12	22.54	0.28
	LOWER	77.32	18.75	0.00
1989	PERCENT	79.81	19.86	0.33
N = 1,398	UPPER	81.65	21.69	0.63
	LOWER	77.96	18.04	0.03

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 16: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO HAVE BEEN TOLD THEY HAVE HIGH BLOOD PRESSURE, BY YEAR AND GENDER, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
SAMPLE YEAR				
1984	PERCENT	25.56	22.01	23.73
	SAMPLE SIZE	450	636	1086
	UPPER	30.29	25.69	26.68
	LOWER	20.82	18.32	20.79
1985	PERCENT	21.48	22.97	22.24
	SAMPLE SIZE	595	774	1369
	UPPER	25.22	26.42	24.82
	LOWER	17.73	19.53	19.67
1986	PERCENT	19.07	22.56	20.86
	SAMPLE SIZE	658	911	1569
	UPPER	22.26	25.45	23.01
	LOWER	15.89	19.68	18.71
1987	PERCENT	20.53	20.80	20.67
	SAMPLE SIZE	756	1028	1784
	UPPER	23.66	23.67	22.76
	LOWER	17.39	17.94	18.58
1988	PERCENT	19.51	21.73	20.65
	SAMPLE SIZE	1068	1376	2444
	UPPER	22.19	24.30	22.54
	LOWER	16.83	19.15	18.75
1989	PERCENT	18.24	21.40	19.86
	SAMPLE SIZE	1094	1304	2398
	UPPER	20.85	24.01	21.69
	LOWER	15.64	18.79	18.04

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 17: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO HAVE BEEN TOLD THEY HAVE HIGH BLOOD PRESSURE, BY SEX AND RACE/ETHNICITY, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
RACE / ETHNICITY				
WHITE	PERCENT	22.12	23.15	22.65
	SAMPLE SIZE	3340	4314	7654
	UPPER	23.80	24.59	23.75
	LOWER	20.43	21.71	21.56
BLACK	PERCENT	24.11	27.22	25.74
	SAMPLE SIZE	259	431	690
	UPPER	30.00	32.20	29.61
	LOWER	18.22	22.23	21.88
HISPANIC	PERCENT	15.61	18.04	16.82
	SAMPLE SIZE	743	937	1680
	UPPER	18.63	21.17	19.03
	LOWER	12.60	14.92	14.60
OTHER	PERCENT	15.81	11.78	13.70
	SAMPLE SIZE	279	347	626
	UPPER	21.04	16.35	17.17
	LOWER	10.57	7.20	10.24
TOTAL	PERCENT	20.47	21.55	21.03
	SAMPLE SIZE	4621	6029	10650
	UPPER	21.85	22.79	21.95
	LOWER	19.09	20.31	20.10

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 18A: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO HAVE BEEN TOLD THEY HAVE HIGH BLOOD PRESSURE, BY AGE, GENDER AND EDUCATION, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

MALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	6.42	9.06	0.00	7.57
	SAMPLE SIZE	330	298	0	628
	UPPER	9.53	12.88	0.00	10.07
	LOWER	3.31	5.24	0.00	5.07
25-34	PERCENT	11.73	9.68	0.00	10.47
	SAMPLE SIZE	478	823	1	1302
	UPPER	14.97	11.97	0.00	12.35
	LOWER	8.48	7.38	0.00	8.58
35-44	PERCENT	13.08	19.99	0.00	18.32
	SAMPLE SIZE	226	833	0	1059
	UPPER	17.94	23.20	0.00	21.07
	LOWER	8.22	16.78	0.00	15.58
45-54	PERCENT	23.79	28.38	0.00	26.54
	SAMPLE SIZE	210	373	1	584
	UPPER	30.18	34.16	0.00	30.84
	LOWER	17.41	22.60	0.00	22.24
55-64	PERCENT	42.80	34.05	0.00	37.52
	SAMPLE SIZE	195	292	1	488
	UPPER	50.88	40.48	0.00	42.54
	LOWER	34.71	27.61	0.00	32.51
65 +	PERCENT	38.58	39.91	0.00	38.94
	SAMPLE SIZE	282	274	4	560
	UPPER	45.24	46.52	0.00	43.63
	LOWER	31.92	33.30	0.00	34.26
TOTAL	PERCENT	20.12	20.78	0.00	20.47
	SAMPLE SIZE	1721	2893	7	4621
	UPPER	22.28	22.58	0.00	21.35
	LOWER	17.96	18.98	0.00	19.09

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 18B: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO HAVE BEEN TOLD THEY HAVE HIGH BLOOD PRESSURE, BY AGE, GENDER AND EDUCATION, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

FEMALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	7.60	5.83	0.00	6.77
	SAMPLE SIZE	365	360	0	725
	UPPER	10.79	8.47	0.00	8.86
	LOWER	4.42	3.19	0.00	4.68
25-34	PERCENT	9.75	9.14	0.00	9.38
	SAMPLE SIZE	597	929	0	1526
	UPPER	12.46	11.29	0.00	11.07
	LOWER	7.04	6.98	0.00	7.70
35-44	PERCENT	15.90	10.93	0.00	12.70
	SAMPLE SIZE	432	882	2	1316
	UPPER	20.15	13.44	0.00	14.92
	LOWER	11.64	8.43	0.00	10.49
45-54	PERCENT	28.14	23.54	40.46	25.75
	SAMPLE SIZE	319	419	2	740
	UPPER	33.90	28.73	100.00	29.58
	LOWER	22.37	18.36	0.00	21.93
55-64	PERCENT	44.20	32.28	43.53	39.01
	SAMPLE SIZE	348	327	2	677
	UPPER	50.40	38.03	100.00	43.39
	LOWER	[illegible]01	26.54	0.00	34.62
65 +	PERCENT	45.95	44.71	31.08	45.37
	SAMPLE SIZE	588	452	5	1045
	UPPER	50.76	49.99	79.91	48.88
	LOWER	41.14	39.43	0.00	41.86
TOTAL	PERCENT	25.31	18.13	24.20	21.55
	SAMPLE SIZE	2649	3369	11	6029
	UPPER	27.29	19.66	50.86	22.79
	LOWER	23.34	16.60	0.00	20.31

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 18C: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO HAVE BEEN TOLD THEY HAVE HIGH BLOOD PRESSURE, BY AGE, GENDER AND EDUCATION, 1984-89 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

TOTAL

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	6.97	7.45	0.00	7.18
	SAMPLE SIZE	695	658	0	1353
	UPPER	9.20	9.78	0.00	8.82
	LOWER	4.73	5.12	0.00	5.54
25-34	PERCENT	10.73	9.41	0.00	9.93
	SAMPLE SIZE	1075	1752	1	2828
	UPPER	12.86	10.98	0.00	11.19
	LOWER	8.60	7.84	0.00	8.66
35-44	PERCENT	14.78	15.89	0.00	15.52
	SAMPLE SIZE	658	1715	2	2375
	UPPER	17.99	17.98	0.00	17.28
	LOWER	11.56	13.81	0.00	13.76
45-54	PERCENT	26.20	26.11	22.23	26.14
	SAMPLE SIZE	529	792	3	1324
	UPPER	30.42	30.06	63.90	29.02
	LOWER	21.98	22.17	0.00	23.27
55-64	PERCENT	43.64	33.25	25.57	38.30
	SAMPLE SIZE	543	619	3	1165
	UPPER	48.57	37.71	71.35	41.63
	LOWER	38.72	28.80	0.00	34.98
65 +	PERCENT	43.12	42.57	15.26	42.73
	SAMPLE SIZE	870	726	9	1605
	UPPER	47.01	46.74	42.80	45.55
	LOWER	39.23	38.40	0.00	39.90
TOTAL	PERCENT	22.98	19.50	13.69	21.03
	SAMPLE SIZE	4370	6262	18	10650
	UPPER	24.43	20.68	29.20	21.95
	LOWER	21.52	18.32	0.00	20.10

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 19: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT DRINKING 60 OR MORE ALCOHOLIC BEVERAGES PER MONTH, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SIXTY OR MORE ALCOHOLIC BEVERAGES PER MO		
		NO	YES	UNK/REF
SAMPLE YEAR				
1984	PERCENT	89.72	9.88	0.40
N = 1,086	UPPER	91.79	11.94	0.73
	LOWER	87.64	7.83	0.07
1985	PERCENT	91.33	7.80	0.86
N = 1,369	UPPER	92.99	9.38	1.40
	LOWER	89.67	6.22	0.33
1986	PERCENT	91.49	7.59	0.92
N = 1,569	UPPER	93.06	9.09	1.48
	LOWER	89.92	6.09	0.36
1987	PERCENT	90.72	8.75	0.54
N = 1,784	UPPER	92.47	10.46	0.90
	LOWER	88.96	7.03	0.17
1988	PERCENT	90.83	8.36	0.81
N = 2,444	UPPER	92.15	9.63	1.25
	LOWER	89.50	7.09	0.38
1989	PERCENT	95.01	4.28	0.70
N = 2,398	UPPER	96.00	5.20	1.08
	LOWER	94.03	3.37	0.33

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 20: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT DRINKING 60 OR MORE ALCOHOLIC BEVERAGES PER MONTH, BY SEX AND RACE/ETHNICITY, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
RACE / ETHNICITY				
WHITE	PERCENT	14.15	3.61	8.72
	SAMPLE SIZE	3340	4314	7654
	UPPER	15.56	4.25	9.50
	LOWER	12.75	2.97	7.93
BLACK	PERCENT	10.49	1.80	5.92
	SAMPLE SIZE	259	431	690
	UPPER	15.90	3.14	8.69
	LOWER	5.09	0.46	3.16
HISPANIC	PERCENT	10.50	2.60	6.59
	SAMPLE SIZE	743	937	1680
	UPPER	13.06	3.89	8.03
	LOWER	7.95	1.31	5.15
OTHER	PERCENT	9.09	1.19	4.97
	SAMPLE SIZE	279	347	626
	UPPER	13.17	2.32	7.02
	LOWER	5.02	0.07	2.92
TOTAL	PERCENT	12.78	3.09	7.81
	SAMPLE SIZE	4621	6029	10650
	UPPER	13.93	3.59	8.44
	LOWER	11.62	2.59	7.17

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 21A: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT DRINKING 60 OR MORE ALCOHOLIC BEVERAGES PER MONTH, BY AGE, SEX AND EDUCATION, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

MALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	16.19	15.56	0.00	15.92
	SAMPLE SIZE	330	298	0	628
	UPPER	21.15	20.02	0.00	19.32
	LOWER	11.23	11.10	0.00	12.52
25-34	PERCENT	15.47	9.71	0.00	11.96
	SAMPLE SIZE	478	823	1	1302
	UPPER	19.43	11.91	0.00	14.03
	LOWER	11.51	7.50	0.00	9.89
35-44	PERCENT	13.91	12.81	0.00	13.07
	SAMPLE SIZE	226	833	0	1059
	UPPER	18.57	15.48	0.00	15.38
	LOWER	9.25	10.13	0.00	10.76
45-54	PERCENT	11.81	15.30	0.00	13.91
	SAMPLE SIZE	210	373	1	584
	UPPER	17.14	19.62	0.00	17.36
	LOWER	6.48	10.98	0.00	10.46
55-64	PERCENT	10.59	14.73	0.00	12.99
	SAMPLE SIZE	195	292	1	488
	UPPER	15.06	19.71	0.00	16.54
	LOWER	6.13	9.75	0.00	9.44
65 +	PERCENT	7.89	8.83	0.00	8.28
	SAMPLE SIZE	282	274	4	560
	UPPER	11.76	12.43	0.00	10.89
	LOWER	4.03	5.24	0.00	5.67
TOTAL	PERCENT	13.21	12.52	0.00	12.78
	SAMPLE SIZE	1721	2893	7	4621
	UPPER	15.16	13.92	0.00	13.93
	LOWER	11.25	11.12	0.00	11.62

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 21B: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT DRINKING 60 OR MORE ALCOHOLIC BEVERAGES PER MONTH, BY AGE, SEX AND EDUCATION, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

FEMALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	3.33	3.55	0.00	3.43
	SAMPLE SIZE	365	360	0	725
	UPPER	5.13	6.15	0.00	4.98
	LOWER	1.52	0.94	0.00	1.88
25-34	PERCENT	2.34	3.07	0.00	2.77
	SAMPLE SIZE	597	929	0	1526
	UPPER	3.69	4.35	0.00	3.71
	LOWER	0.99	1.79	0.00	1.84
35-44	PERCENT	3.96	2.48	0.00	3.01
	SAMPLE SIZE	432	882	2	1316
	UPPER	6.19	3.64	0.00	4.11
	LOWER	1.74	1.32	0.00	1.92
45-54	PERCENT	2.87	3.51	59.54	3.35
	SAMPLE SIZE	319	419	2	740
	UPPER	4.88	5.65	100.00	4.84
	LOWER	0.86	1.37	0.00	1.85
55-64	PERCENT	4.12	3.46	0.00	3.82
	SAMPLE SIZE	348	327	2	677
	UPPER	6.45	5.59	0.00	5.41
	LOWER	1.79	1.32	0.00	2.22
65 +	PERCENT	1.58	4.05	0.00	2.59
	SAMPLE SIZE	588	452	5	1045
	UPPER	2.71	6.04	0.00	3.64
	LOWER	0.46	2.06	0.00	1.54
TOTAL	PERCENT	2.92	3.22	7.62	3.09
	SAMPLE SIZE	2649	3369	11	6029
	UPPER	3.63	3.93	22.41	3.59
	LOWER	2.20	2.52	0.00	2.59

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 21C: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT DRINKING 60 OR MORE ALCOHOLIC BEVERAGES PER MONTH, BY AGE, SEX AND EDUCATION, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

TOTAL

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	10.24	9.57	0.00	9.93
	SAMPLE SIZE	695	658	0	1353
	UPPER	13.10	12.17	0.00	11.87
	LOWER	7.37	6.96	0.00	7.99
25-34	PERCENT	8.85	6.43	0.00	7.39
	SAMPLE SIZE	1075	1752	1	2828
	UPPER	10.99	7.71	0.00	8.54
	LOWER	6.71	5.14	0.00	6.23
35-44	PERCENT	7.93	8.14	0.00	8.06
	SAMPLE SIZE	658	1715	2	2375
	UPPER	10.23	9.73	0.00	9.36
	LOWER	5.63	6.54	0.00	6.75
45-54	PERCENT	6.86	9.78	32.71	8.57
	SAMPLE SIZE	529	792	3	1324
	UPPER	9.53	12.34	86.56	10.47
	LOWER	4.19	7.22	0.00	6.67
55-64	PERCENT	6.69	9.64	0.00	8.17
	SAMPLE SIZE	543	619	3	1165
	UPPER	8.95	12.62	0.00	10.08
	LOWER	4.43	6.66	0.00	6.25
65 +	PERCENT	4.01	6.18	0.00	4.93
	SAMPLE SIZE	870	726	9	1605
	UPPER	5.67	8.13	0.00	6.19
	LOWER	2.34	4.23	0.00	3.68
TOTAL	PERCENT	7.55	8.03	4.31	7.81
	SAMPLE SIZE	4370	6262	18	10650
	UPPER	8.54	8.84	12.72	8.44
	LOWER	6.56	7.21	0.00	7.17

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 22: PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT DRIVING AFTER DRINKING TOO MUCH IN THE LAST MONTH, 1984 - 1989 FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		DROVE AFTER DRINKING TOO MUCH IN LAST MO		
		NO	YES	UNK/REF
SAMPLE YEAR				
1984	PERCENT	95.55	4.19	0.26
N = 1,086	UPPER	97.01	5.62	0.59
	LOWER	94.09	2.76	0.00
1985	PERCENT	96.65	2.87	0.48
N = 1,369	UPPER	97.69	3.83	0.88
	LOWER	95.62	1.90	0.08
1986	PERCENT	95.20	4.51	0.28
N = 1,569	UPPER	96.48	5.76	0.59
	LOWER	93.93	3.27	0.00
1987	PERCENT	95.70	3.89	0.41
N = 1,784	UPPER	96.75	4.89	0.75
	LOWER	94.65	2.90	0.07
1988	PERCENT	95.94	4.00	0.06
N = 2,444	UPPER	96.84	4.89	0.16
	LOWER	95.05	3.11	0.00
1989	PERCENT	96.39	3.50	0.11
N = 2,398	UPPER	97.27	4.36	0.25
	LOWER	95.51	2.63	0.00

WEIGHTED TO REFLECT THE AGE-, RACE- AND SEX-SPECIFIC DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 23:

PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT
DRIVING AFTER DRINKING TOO MUCH IN THE LAST MONTH, BY GENDER AND RACE/ETHNICITY, 1984 - 1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

		SEX		
		MALE	FEMALE	TOTAL
RACE / ETHNICITY				
WHITE	PERCENT	5.28	1.65	3.41
	SAMPLE SIZE	3340	4314	7654
	UPPER	6.11	2.06	3.86
	LOWER	4.45	1.24	2.96
BLACK	PERCENT	3.65	1.41	2.47
	SAMPLE SIZE	259	431	690
	UPPER	6.86	2.94	4.19
	LOWER	0.44	0.00	0.75
HISPANIC	PERCENT	10.38	2.10	6.28
	SAMPLE SIZE	743	937	1680
	UPPER	13.01	3.16	7.71
	LOWER	7.76	1.04	4.85
OTHER	PERCENT	3.39	0.97	2.13
	SAMPLE SIZE	279	347	626
	UPPER	5.80	2.14	3.44
	LOWER	0.97	0.00	0.82
TOTAL	PERCENT	6.01	1.66	3.78
	SAMPLE SIZE	4621	6029	10650
	UPPER	6.83	2.02	4.22
	LOWER	5.19	1.30	3.34

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVALS

TABLE 24A:

PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT
DRIVING AFTER DRINKING TOO MUCH IN THE LAST MONTH, BY GENDER, AGE AND EDUCATION, 1984 - 1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

MALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	11.10	11.03	0.00	11.07
	SAMPLE SIZE	330	298	0	628
	UPPER	15.03	14.95	0.00	13.87
	LOWER	7.18	7.11	0.00	8.27
25-34	PERCENT	8.74	10.72	0.00	9.92
	SAMPLE SIZE	478	823	1	1302
	UPPER	11.86	13.26	0.00	11.88
	LOWER	5.61	8.18	0.00	7.95
35-44	PERCENT	6.65	5.16	0.00	5.52
	SAMPLE SIZE	226	833	0	1059
	UPPER	10.08	6.82	0.00	7.02
	LOWER	3.22	3.49	0.00	4.02
45-54	PERCENT	2.38	4.22	0.00	3.49
	SAMPLE SIZE	210	373	1	584
	UPPER	4.38	6.67	0.00	5.18
	LOWER	0.37	1.76	0.00	1.80
55-64	PERCENT	0.85	0.26	0.00	0.50
	SAMPLE SIZE	195	292	1	488
	UPPER	1.85	0.62	0.00	0.96
	LOWER	0.00	0.00	0.00	0.04
65 +	PERCENT	0.00	0.00	0.00	0.00
	SAMPLE SIZE	282	274	4	560
	UPPER	0.00	0.00	0.00	0.00
	LOWER	0.00	0.00	0.00	0.00
TOTAL	PERCENT	5.52	6.10	0.00	6.01
	SAMPLE SIZE	1721	2893	7	4621
	UPPER	7.28	7.10	0.00	6.83
	LOWER	4.55	5.10	0.00	5.19

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 24B:

PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT
DRIVING AFTER DRINKING TOO MUCH IN THE LAST MONTH, BY GENDER, AGE AND EDUCATION, 1984 - 1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

FEMALES

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	3.01	4.16	0.00	3.55
	SAMPLE SIZE	365	360	0	725
	UPPER	4.90	6.62	0.00	5.08
	LOWER	1.12	1.70	0.00	2.02
25-34	PERCENT	2.64	3.22	0.00	2.99
	SAMPLE SIZE	597	929	0	1526
	UPPER	3.92	4.56	0.00	3.94
	LOWER	1.35	1.88	0.00	2.03
35-44	PERCENT	1.12	1.32	0.00	1.24
	SAMPLE SIZE	432	882	2	1316
	UPPER	2.18	1.99	0.00	1.81
	LOWER	0.06	0.64	0.00	0.66
45-54	PERCENT	0.88	2.01	0.00	1.47
	SAMPLE SIZE	319	419	2	740
	UPPER	1.72	3.67	0.00	2.43
	LOWER	0.04	0.35	0.00	0.51
55-64	PERCENT	0.00	0.00	0.00	0.00
	SAMPLE SIZE	348	327	2	677
	UPPER	0.00	0.00	0.00	0.00
	LOWER	0.00	0.00	0.00	0.00
65 +	PERCENT	0.00	0.00	0.00	0.00
	SAMPLE SIZE	588	452	5	1045
	UPPER	0.00	0.00	0.00	0.00
	LOWER	0.00	0.00	0.00	0.00
TOTAL	PERCENT	1.31	1.98	0.00	1.66
	SAMPLE SIZE	2649	3369	11	6029
	UPPER	1.76	2.54	0.00	2.02
	LOWER	0.86	1.43	0.00	1.30

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL

TABLE 24C:

PERCENT OF CALIFORNIA ADULTS AGED 18 AND OLDER WHO SELF-REPORT
DRIVING AFTER DRINKING TOO MUCH IN THE LAST MONTH, BY GENDER, AGE AND EDUCATION, 1984 - 1989
FROM CALIFORNIA BEHAVIORAL RISK FACTOR SURVEY

TOTAL

AGE CATEGORY		EDUCATIONAL LEVEL			
		HIGH SCHOOL OR LESS	MORE THAN HIGH SCHOOL	UNKNOWN	TOTAL
18-24	PERCENT	7.36	7.60	0.00	7.47
	SAMPLE SIZE	695	658	0	1353
	UPPER	9.66	9.93	0.00	9.11
	LOWER	5.05	5.28	0.00	5.82
25-34	PERCENT	5.66	7.01	0.00	6.47
	SAMPLE SIZE	1075	1752	1	2828
	UPPER	7.37	8.47	0.00	7.57
	LOWER	3.96	5.56	0.00	5.37
35-44	PERCENT	3.32	3.42	0.00	3.38
	SAMPLE SIZE	658	1715	2	2375
	UPPER	4.84	4.39	0.00	4.19
	LOWER	1.80	2.45	0.00	2.57
45-54	PERCENT	1.55	3.18	0.00	2.47
	SAMPLE SIZE	529	792	3	1324
	UPPER	2.56	4.71	0.00	3.44
	LOWER	0.54	1.65	0.00	1.50
55-64	PERCENT	0.34	0.14	0.00	0.24
	SAMPLE SIZE	543	619	3	1165
	UPPER	0.73	0.34	0.00	0.46
	LOWER	0.00	0.00	0.00	0.02
65 +	PERCENT	0.00	0.00	0.00	0.00
	SAMPLE SIZE	870	726	9	1605
	UPPER	0.00	0.00	0.00	0.00
	LOWER	0.00	0.00	0.00	0.00
TOTAL	PERCENT	3.38	4.11	0.00	3.78
	SAMPLE SIZE	4370	6262	18	10650
	UPPER	4.05	4.69	0.00	4.22
	LOWER	2.72	3.52	0.00	3.34

WEIGHTED TO REFLECT THE AGE-, RACE-, AND SEX-SPECIFIC
DISTRIBUTION OF THE 1986 CALIFORNIA POPULATION
UPPER/LOWER = 95% CONFIDENCE INTERVAL